

Nevada School Wellness Practices

CLARK COUNTY SCHOOL DISTRICT

Introduction

- Schools play a pivotal role in the promotion of students' health, well-being, and ability to learn.
- School districts participating in the National School Lunch Program and/or School Breakfast Program are required to develop a local school wellness policy that promotes the health of students and addresses the growing problem of childhood obesity¹.
- The Nevada State School Wellness policy has been in place since 2007 and was recently revised and reissued in 2014.
- A progressive and more collaborative school/health interagency partnership is emerging to optimize school wellness programming outcomes in Nevada. As a beginning point, a 36-item survey to assess the school wellness practices in NV was disseminated to NV K-12 public schools through NV superintendents' offices in the Fall of 2014.
- The partnership will use the results of the survey to develop statewide priorities for improving school wellness in Nevada schools.

Methodology

The purpose of this brief report is to provide district superintendents with aggregated information about the physical activity and nutrition practices of elementary, middle, and high schools in their districts. In this report we focus on one universal wellness practice - the presence of a school wellness coordinator, three specific physical activity (PA) practices, and four specific nutrition practices.

We selected these items because they (a) had the greatest variability throughout the state AND (b) were perceived to be feasibly modifiable. The PA practices are 1) minutes of required physical education: at least 150 minutes per week and at least 90 minutes per week; 2) minutes of recess provided: at least 100 minutes per week and at least 60 minutes per week (elementary schools only); and 3) school support of active transportation through the existence of an active travel plan (e.g., Safe Routes to Schools). Nutrition practices are 1) student access to a salad bar/traveling salad bar; 2) school participation in a fresh fruit and vegetable snack program; 3) scheduling of daily nutrition breaks; and 4) identification of nutrition education goals. A complete report of all survey items is in the Appendix.

For each of these items, we identify the percentage of schools in Clark County who indicated affirmatively and compare those percentages with percentages of schools that indicated affirmatively from the rest of the state. We present error bars indicating 95% confidence intervals around the percentages. Note that overlapping confidence intervals indicate that the difference between Clark County and the rest of the state is not statistically significant at the $p < 0.05$ level.

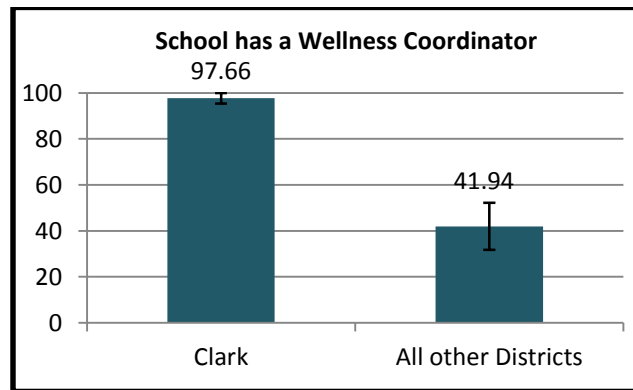
Findings

After removal of duplicate surveys from the same schools and surveys with a significant number of missing responses, our sample included 175 elementary schools (74% response rate), 48 middle schools (84% response rate) and 46 high schools (100% response rate) in the Clark County School District².

Elementary Schools

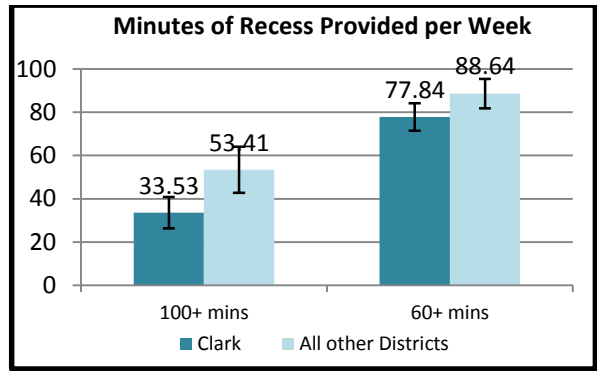
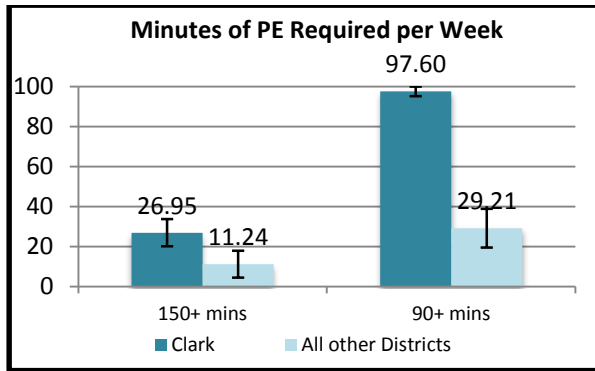
School Wellness Coordinator

School wellness coordinators play an important role in implementing strong physical activity and nutrition programs in schools. An overwhelming majority and significantly more Clark County elementary schools reported having a school wellness coordinator relative to the rest of the schools in the state.



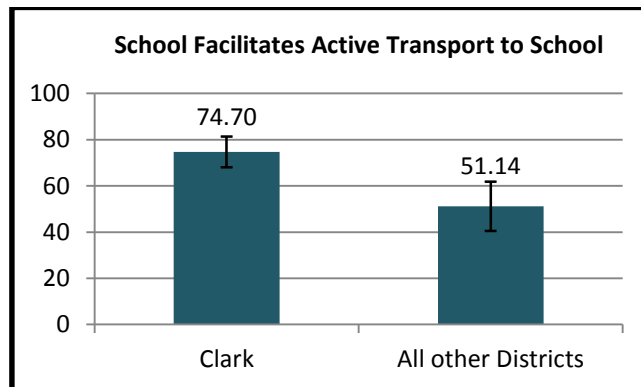
Physical Education and Recess Minutes

Compared to other NV elementary schools, significantly more Clark County elementary schools reported providing 90 or more minutes of physical education per week. However, the national recommendation for the number of weekly PE minutes elementary students should receive is 150, and though significantly more Clark County elementary schools reported providing 150 minutes of PE compared to the rest of the state, less than 30% of Clark County schools indicated doing so, suggesting an important area for improvement. In addition, the national recommendation is that schools provide elementary students with at least 20 minutes of recess each day, equivalent to 100 minutes per week. Most Clark County elementary schools (over 77%) reported providing 60 minutes or more recess per week (equating to an average of 12 minutes or more per day). Compared to other NV elementary schools, significantly fewer Clark County schools reported providing 100 minutes of recess.



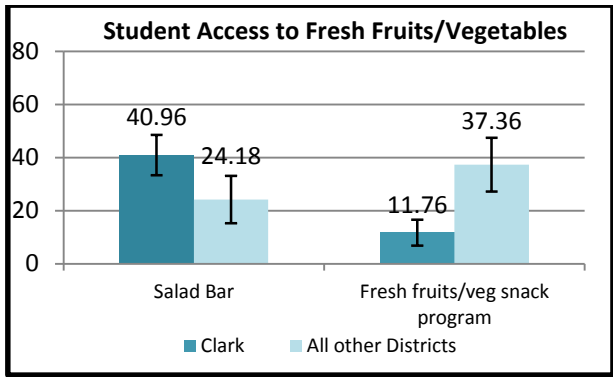
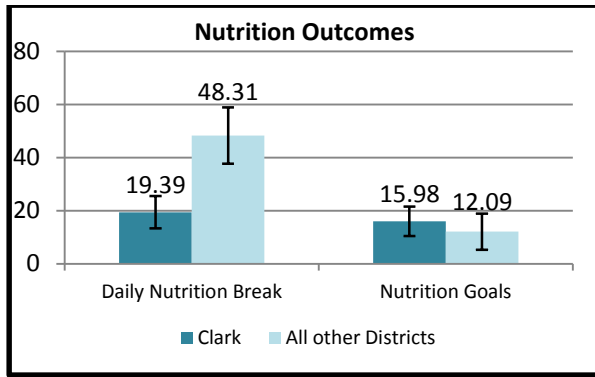
Active Transport

Facilitating active transport (e.g., walking and biking) to school has been shown to help students accrue important minutes in moderate to vigorous physical activity. Compared to other NV elementary schools, significantly more Clark County elementary schools reported facilitating active transport to school. Examples of such efforts include the Safe Routes to School and Walking School Bus programs. Schools also work with their local municipalities to take traffic calming measures such as school zone flashing lights, speed bumps, traffic lights, narrower streets, medians, and well-placed and well-marked cross walks with crossing guards.



Nutrition

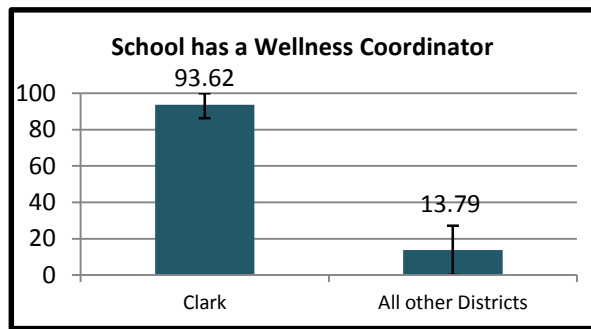
Providing students with daily access to fresh fruits and vegetables, implementing daily nutrition breaks, and identifying nutrition goals can facilitate healthier eating, potentially contributing to reductions in childhood obesity and increases in attention and cognition. Compared to elementary schools in the rest of Nevada, significantly fewer Clark County elementary schools reported providing students with a daily nutrition break, and similar to their NV elementary school counterparts, few Clark County elementary schools reported having school nutrition education goals. In addition, though significantly more Clark County elementary schools reported having a salad bar compared to elementary schools in the rest of the state, significantly fewer Clark County elementary schools reported participating in the fresh fruits and vegetable snack program compared to the rest of elementary schools in the state.



Middle Schools

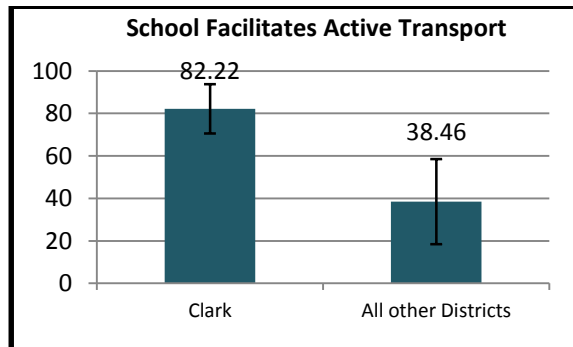
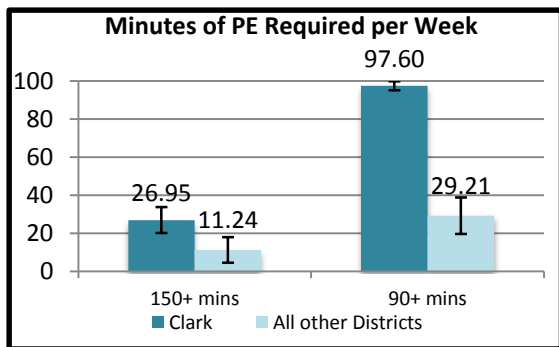
School Wellness Coordinator

An overwhelming majority and significantly more Clark County middle schools reported having a school wellness coordinator relative to the rest of the middle schools in the state.



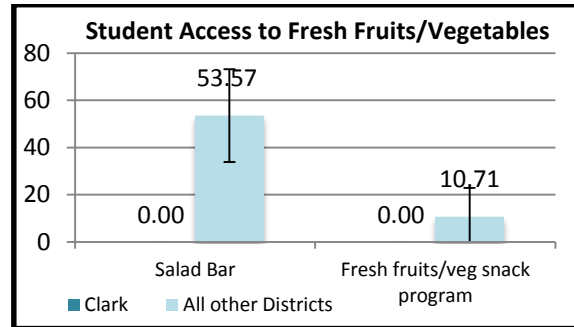
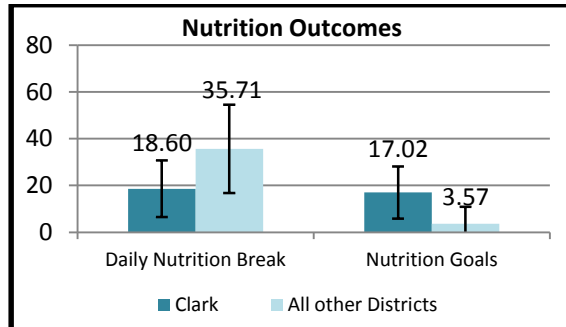
Physical Education Minutes and Active Transport

The national recommendation for middle schools is that students should receive at least 225 minutes of PE per week³. Our results suggest that most Clark County middle schools, and indeed, most schools throughout the state of Nevada are not meeting that recommendation. In fact, fewer than 27% of Clark County middle schools indicated that they provide even 150 minutes or more of PE per week, and though that percentage is higher than the percentage of schools in the rest of the state, this still suggests substantial room for improvement. In terms of active transport to school, however, Clark County middle schools are doing quite well, with over 80% of middle schools reporting that they facilitate active transportation to school through walking or biking. Compared to other NV middle schools, significantly more Clark middle schools reported facilitating active transport to school.



Nutrition

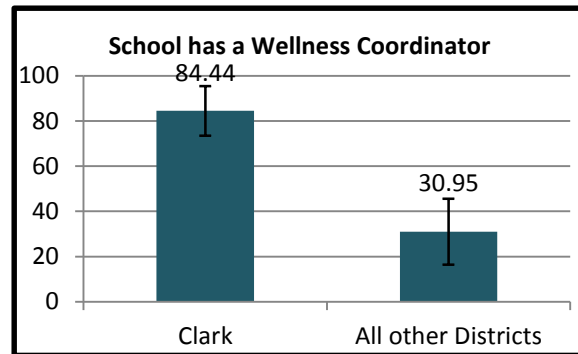
Though differences were not statistically significant, fewer Clark County middle schools reported providing students with a daily nutrition break, and more Clark County middle schools reported having school nutrition education goals. Clark County middle schools reported no student access to a salad bar or to the fresh fruits and vegetable snack program. Middle school student access to salad bar is significantly more prevalent in all other districts.



High Schools

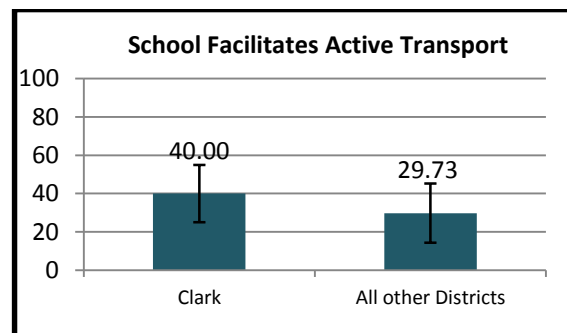
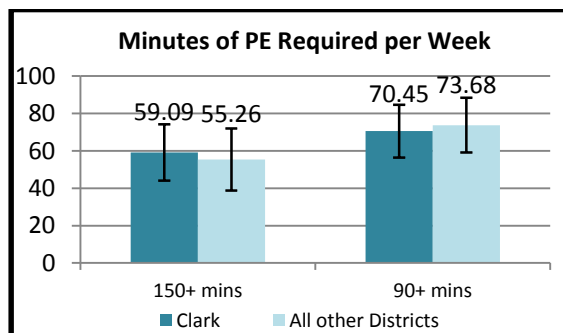
School Wellness Coordinator

An overwhelming majority and significantly more Clark County high schools reported having a school wellness coordinator.



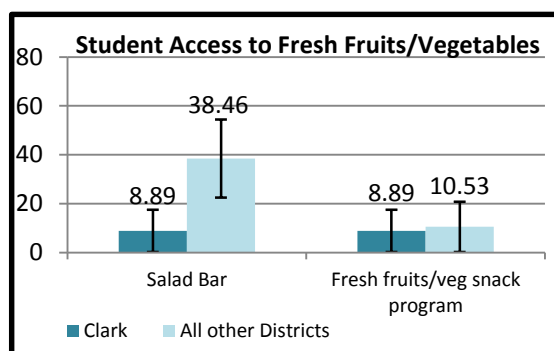
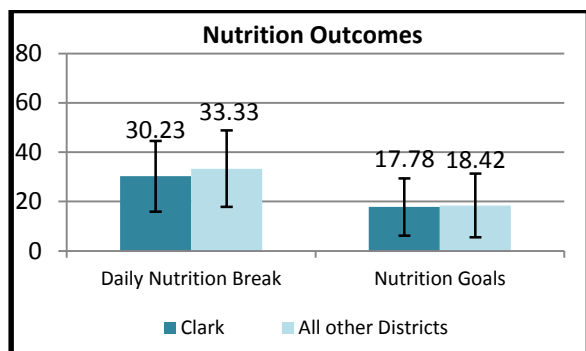
Physical Education Minutes and Active Transport

The national recommendation for middle schools is that students should receive at least 225 minutes of PE per week³. As with middle schools, Clark County and the rest of the state of Nevada have a long way to go toward meeting that recommendation. Over half of Clark County high schools reported requiring at least 150 minutes of PE per week, and this was not significantly different from the percentage of high schools in the rest of the state who reported requiring at least 150 minutes of weekly PE. Compared to other NV high schools, more Clark middle schools reported facilitating active transport to school (e.g., walking and biking to school), but these differences were not significant.



Nutrition

Similar to high schools in the rest of the state, just over 30% of Clark County high schools reported providing students with a daily nutrition break. Additionally, similar to high schools in the rest of the state, 18% of Clark County high schools reported having nutrition education goals. Significantly fewer Clark County high schools reported student access to a salad bar, and though the difference is not statistically significant, fewer Clark County high schools reported participation in the fresh fruits and vegetable snack program.



This report has provided the Clark County School District with a detailed account of select aspects of school wellness practices within Clark County schools compared to schools in the rest of the state. Overall, there are many wellness practice aspects on which Clark County schools are performing much better than schools in other districts throughout the state, including having a designated school wellness coordinator, the number of minutes of physical education students receive, and facilitating active transport to school. But in the case of the number of physical education minutes, Clark County schools fall far short of national recommendations, and Clark County schools perform worse on elementary student opportunities for recess relative to the rest of the state. We also found that a lower percentage of Clark County middle schools provide student access to fresh fruits and vegetables (salad bar or participation in fresh fruits and vegetable snack program) relative to the rest of the state.

Recommendations

Comprehensive school wellness programs provide a healthy school environment where the promotion and reinforcement of healthful dietary behaviors and physical activity can be fostered. In 2014, the Centers for Disease Control and Prevention released a comprehensive report summarizing the evidence-based linkages between student physical activity, nutrition, and overall health and academic achievement.⁵ This report provides salient rationale for school investment in improving school wellness programming as an investment in the whole child and in improving student academic performance. Based on the findings detailed in this report, we provide the following recommendations for school wellness practice improvement in physical activity and nutrition areas.

Physical Activity⁴

Nevada schools do not meet national recommendations for recess or physical education, and compared to the rest of the state, Clark County schools provide fewer recess minutes to elementary students. Through superintendent leadership and strong interagency partnerships, improvement in both physical education and recess is possible.

Physical Education

Numerous authorities recommend that elementary children receive PE daily and for a total of at least 150 minutes per week and secondary students receive PE for a total of 225 minutes per week. In most cases, Clark County schools fall far short of these recommendations.

Strategies for Improvement

- Consider hiring additional PE specialists and/or providing staff development for classroom teachers so they can implement evidence-based PE programs under the supervision of a PE specialist.
- National physical education and health authorities recommend PE be taught by certified specialists. Compared to classroom teachers, specialists conduct longer lessons and cancel them less. In addition, their students are more likely to engage in high intensity physical activity, resulting in increased physical fitness and skills.
- Employing more PE specialists may not be economically feasible now. In the interim, consider staff development for classroom teachers or part-time teachers who implement an evidence-based PE program (e.g., SPARK-PE, CATCH PE, or planet health) under the direction of a PE specialist.

Recess

Besides providing physical activity, recess may increase academic attentiveness and on-task classroom behavior. National physical education and health authorities recommend that elementary schools provide all students with at least 20 minutes of recess each day. Students don't always receive recess even when it is scheduled because teachers withhold it for disciplinary or academic reasons.

Strategies for Improvement

- Require that elementary schools make morning and afternoon recess part of the formalized schedule.
- Provide recess-related staff development for classroom teachers, supervisors, and recess volunteers.
- Implement policies that ensure students have access to recess time.

Nutrition

Deficits in dietary nutrients found in fruits in vegetables have been found to be associated with lower academic performance. This report found that the Clark County middle schools participating in this report do provide a salad bar and they do not participate in the fruits and vegetable snack program.

Salad Bar and Fruit and Vegetable Participation

Based on the results from this report, salad bar access and fruit and vegetable program participation at the middle school level should be examined and targeted for improvement.

Strategy for Improvement

- Work with the district food services director and the NV Department of Agriculture to develop strategies for middle school adoption of salad bar access and participation in the fruits and vegetable snack program.

APPENDIX: Comparison of all Items between Schools in Clark County School District vs. Schools in Rest of State

OVERALL WELLNESS

	Elementary Schools			Middle Schools			High Schools		
	Clark	All Others	t value	Clark	All Others	t value	Clark	All Others	t value
School has a school wellness coordinator	97.7	41.9	10.57***	93.6	13.8	10.72***	84.4	31.0	5.96***
School wellness policy is disseminated to staff annually	89.4	54.4	6.10***	69.6	39.3	2.60*	77.8	47.6	3.03**

PHYSICAL ACTIVITY

	Elementary Schools			Middle Schools			High Schools		
	Clark	Others	t value	Clark	Others	t value	Clark	Others	t value
All students required to participate in PE 150+ mins/week	27.0	11.2	3.26**	76.1	53.9	1.88	59.1	55.3	0.35
All students required to participate in PE 90+ mins/week	97.6	29.2	13.7***	84.8	76.9	0.79	70.5	73.7	-0.32
PE taught by certified PE teacher during all PE lessons	99.4	54.6	8.35***	100.0	88.9	1.80	97.8	86.8	1.83
Recess is provided at least 100 mins/week	33.5	53.4	-3.07**	N/A	N/A	N/A	N/A	N/A	N/A
Loose balls provided during recess	99.4	95.5	1.70	N/A	N/A	N/A	N/A	N/A	N/A
Strategic playground or game markings during recess	97.0	93.2	1.26	N/A	N/A	N/A	N/A	N/A	N/A
Recess playground supervisors trained to promote PA	66.1	44.3	3.39***	N/A	N/A	N/A	N/A	N/A	N/A
School provides classroom activity breaks	83.4	77.5	1.11	36.8	48.0	-0.86	38.6	44.4	-0.52
School provides before school PA programs	51.5	26.7	4.00***	50.0	16.0	3.14**	39.5	14.7	2.55*
School offers intramural programs before school	15.3	4.8	1.64	57.1	0.0	a	76.5	20.0	a
School offers organized sports before school	15.5	19.1	-0.36	50.0	0.0	a	70.6	60.0	a
School offers walking programs before school	58.8	22.7	3.37**	25.0	33.0	a	25.0	25.0	a
School offers dance before school	12.3	4.8	1.23	57.1	0.0	a	47.1	0.0	a
School provides after school PA programs	66.1	55.2	1.66	93.5	65.4	2.75**	77.3	71.4	0.59
School offers intramural programs after school	45.8	32.6	1.47	93.0	46.7	3.33**	87.5	8.7	9.09***
School offers organized sports after school	56.9	52.2	0.53	97.7	94.1	0.56	84.4	84.0	0.04
School offers walking programs after school	22.6	21.4	0.15	11.1	13.3	-0.21	32.3	13.0	1.64
School offers dance after school	42.9	21.4	2.63*	71.8	26.7	3.25**	93.8	39.1	4.84***
<i>School physical activity programming offered during school</i>									
School offers intramural programs during school	21.6	19.1	0.41	33.3	45.5	-0.57	18.8	21.4	-0.18

School offers organized sports during school	38.6	33.3	0.72	41.7	36.4	0.25	52.9	40.0	0.71
School offers walking programs during school	42.9	37.5	0.71	27.3	18.2	0.49	37.5	21.4	0.94
School offers dance during school	20.0	17.7	0.37	41.7	27.3	0.70	62.5	14.3	2.98**
School provides bike rack storage	98.2	91.0	2.23*	97.8	96.3	0.36	84.4	79.0	0.64
School has active transport travel plans (e.g., SRTS)	74.7	51.1	3.73***	82.2	38.5	3.87***	40.0	29.7	0.96
School has traffic calming mechanisms	80.7	67.4	2.39*	54.4	40.5	1.12	60.0	55.3	0.43
Student access to PA is compromised for disciplinary reasons	31.7	38.2	1.04	15.6	37.0	-2.11*	15.9	36.8	-2.16*
Student access to PA is compromised for academic reasons	15.3	36.0	-3.53***	20.0	37.0	-1.59	13.6	18.4	-0.58
Student access to PA is compromised due to space constraints	6.2	8.0	-0.51	11.1	7.4	0.51	22.2	21.1	0.13
Both indoor and outdoor PA facilities are available	82.6	69.3	2.31*	97.8	92.6	0.93	84.4	81.6	0.34
Either indoor or outdoor PA facilities are available	16.8	30.0	-2.25*	2.2	7.4	-0.93	6.7	2.6	0.85

NUTRITION

	Elementary Schools			Middle Schools			High Schools		
	Clark	Others	t value	Clark	Others	t value	Clark	Others	t value
Free breakfast is available to all students every day	47.1	40.0	1.09	51.1	40.7	0.85	60.0	33.3	2.51*
Students are provided 15+ mins for school breakfast	98.2	70.0	5.69***	100.0	78.6	2.71*	93.3	68.4	2.93**
School has a garden	30.6	22.5	1.43	6.4	14.3	-1.03	22.2	10.3	1.50
Garden is integrated into nutrition education program	58.0	47.4	0.77	b	b	b	40.0	25.0	a
Students allowed to consume veg. from garden at school	76.9	80.0	-0.28	33.3	50.0	-0.38	66.7	100.0	a
Students have a salad bar/traveling salad bar	41.0	24.2	2.84**	0.0	53.6	-5.58***	8.9	38.5	-3.29**
School participates in fresh fruit/vegetable snack program	11.8	37.4	-4.51***	0.0	10.7	-1.80	8.9	10.5	-0.25
School provides breakfast in the classroom	27.2	14.4	2.52*	0.0	7.1	-1.44	4.4	5.1	-0.15
Water is freely available to students throughout school day	98.2	97.8	0.24	97.9	100.0	-1.00	97.8	97.4	0.10
School schedules daily nutrition breaks	19.4	48.3	-4.70***	18.6	35.7	-1.63	30.2	33.3	-0.30
School schedules nutrition breaks during special occasions	89.4	76.9	2.33*	86.7	77.3	0.97	70.7	62.9	0.72
School encourages staff to use non-food incentives/rewards	97.0	91.2	1.78	89.4	77.8	1.35	63.6	74.4	-1.05
School participates in scripts, box tops, or labels for educ.	96.5	90.1	1.84	74.5	64.3	0.93	22.2	20.5	0.19
Scripts	4.3	11.1	-1.78	8.9	8.0	0.13	2.2	2.6	-0.10

Box tops	96.5	90.1	1.83	74.5	60.7	1.25	20.0	18.0	0.24
Labels	29.7	38.1	-1.31	13.3	8.0	0.66	6.7	7.7	-0.18
Nutrition education is integrated into curriculum	90.5	64.4	4.68***	78.7	71.4	0.71	84.4	79.5	0.59
School has identified nutrition education goals	16.0	12.1	0.87	17.0	3.6	2.04*	17.8	18.4	-0.07

NOTES

Not all schools provided responses for every item; sample sizes vary across items

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; two-tailed t-tests for differences in proportions/percentages

^a Sample is not large enough for statistical test

^b No responses provided

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Acknowledgements

This publication was supported by the Nevada State Division of Public and Behavioral Health through Grant Number 3U58DP004820-02S1 from the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of neither Division nor the Centers for Disease Control and Prevention.

Endnotes

¹ Established by Child Nutrition and Women, Infant, and Child Reauthorization Act of 2004; Reinforced by the Healthy, Hunger-Free Kids Act of 2010

² During data analysis we identified several cases of duplicate school surveys, often completed from different ip addresses (suggesting completion by different individuals), and often with discrepant responses across the duplicates. Because we could not include a school in the results more than once, we eliminated duplicates from our analysis. In the case of duplicates, we selected which survey to retain based on which survey contained fewer missing responses to survey items. In cases where the number of missing responses were similar, we selected the survey completed last under the assumption that the last survey completed was to correct erroneous information provided in an earlier survey.

³ The national recommendation for the number of PE minutes middle school students should receive per week is 225. However, because some middle school respondents completed the survey using the link for elementary schools, and the elementary school survey allowed for a maximum response of 150 minutes or more per week, we are unable to show the percentage of middle schools that require at least 225 minutes of PE per week.

⁴ Regular engagement in physical activity is important for children's growth, development, and health. The National Physical Activity Guidelines (2008) indicate children should engage in moderate and vigorous physical activity at least 60 minutes each day, but far too many children, including Nevada's children, do not.

⁵The Centers for Disease Control report can be found at:

<http://static.squarespace.com/static/53b1a843e4b0dcbabf4b4b85/t/53d15be7e4b0a7d1d7db0e7d/14062294799/98/health-academic-achievement.pdf>