

Concurrent Session 4-A

A Health Hub: Evaluation of a School-based Nutritional Program

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A Health Hub: Evaluation of a School-based Nutritional Program

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School-Based Nutrition Programs

- School-based nutrition education is ideal because of the direct capacity to reach youth.
- More than one-half of youth in the US eat at least one meal in school.
- Interventions or programs aimed at increasing access to healthy food, physical activities, and increasing knowledge about nutrition can lead to health behavior change and reduce obesity and chronic disease.

Matson-Koffman, D. M., Brownstein, J. N., Neiner, J. A., & Greaney, M. L., 2005
Gortmaker, S. L., Peterson, K., Wiecha, J., Sobol, A. M., Dixit, S., Fox, M. K., & Laird, N., 1999

Disparities

TOWN #1

- Average Life: 88 years
- 9 out of 10 completed HS and 4 out of 5 have higher education
- Average Income: \$144,750

TOWN #2

- Average Life: 80.5 years
- Over half lack a HS diploma and less than 25% have higher education
- Average Income: \$32,108

U.S. Census Bureau, 2010

Middle School Disparities

- Over 60%
 - students identify as Hispanic
 - eligible for Free and Reduced Lunch
 - are English language learners
- One in four of these children are food insecure.
- 57.3% of families are living at or below the Federal Poverty Line without access to safe outdoor places to play.

U.S. Department of Education, 2015

Middle School Health Hub

Services ranging from nutrition education to clinical screenings and referrals to workforce engagement

- Food Pantry
- Nutrition and Physical Activity Classes
 - Champions of Change
 - Gardening
- Peer Support



School Garden



Food Pantry



Activities

Program Evaluation

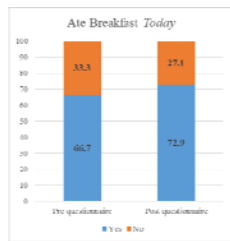
- Pre-and-post questionnaires in the month of March and May
- 26-item questionnaire based on
 - Student age, sex and place born
 - Students' nutrition and physical activity
 - Knowledge
 - Attitudes
 - Beliefs

Quantitative Results on Eating Habits

- Overall, there were small improvements in eating habits and these positive trends in eating habits are promising for future programs.
- Fruit intake and energy drink consumption changed significantly over the program intervention.

Quantitative Results

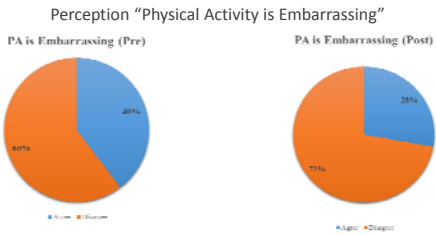
- Ate Breakfast "Today"
- 6.2% increase of eating breakfast
- Access to healthy food from health hub



Quantitative Results for Physical Activity

- Overall, small increase in overall physical activity, these positive trends are significant of programs offered.
- Engaging in physical activity in "past week"
 - Positive increase in the number of days exercised
- Physical Activity can keep you from getting sick
 - Changed significantly

Quantitative Results



Qualitative Results

Name three things you learned from the programs?
"...to eat healthier, eat more veggies, and drink more water."

Have your eating habits changed since participating in the programs? If so, how have they changed?
"...I had gotten stronger and more healthy."
"...instead of ice cream I drink a smoothie now."

Limitations

- Small sample size
 - Response rate
 - Difficult to determine validity
- Questionnaires too long
 - Language barriers
 - Misinterpretation of questions

Discussion and Recommendations

- More involvement from school administration and parents.
- Implement programs more than once a week.
- Further research and innovation of new practices with students.

References

1. Gortmaker, S. L., Peterson, K., Wiecha, J., Sobol, A. M., Dixit, S., Fox, M. K., & Laird, N. (1999). Reducing obesity via a school-based interdisciplinary intervention among youth: Planet health. *Archives of Pediatrics & Adolescent Medicine*, 153(4), 409-418.
2. Matson-Koffman, D. M., Brownstein, J. N., Neiner, J. A., & Greaney, M. L. (2005). A site specific literature review of policy and environmental interventions that promote physical activity and nutrition for cardiovascular health: What works? *American Journal of Health Promotion*, 19(3), 167-193.
3. United States Census Bureau. (2010). State and county quick facts. Retrieved from <http://quikfacts.census.gov/qfd/states/>
4. United States Department of Education. (2015). State and county quick facts. Retrieved from http://nces.ed.gov/globallocator/sch_info_popup.asp?Type=Public&ID=063509005936

Questions?

