Community Needs Assessment:
Fruit and Vegetable Consumption at Laguna Middle School
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Abstract

This community needs assessment focuses on obtaining information about middle school aged children and their consumption of fruits and vegetables. This data will help to determine whether a program or other intervention to help increase the consumption of fruits and vegetables should be developed for students at Laguna Middle School in San Luis Obispo, CA. Based on the data collected, children in California and San Luis Obispo county inadequately consume the recommended intake of fruits and vegetables. Some community partners in the county have taken the initiative to help reduce food insecurity and promote food literacy, however, little data could be found about these types of programs existing at Laguna Middle School. Poverty is the most significant predictor of nutrition status, and over \( \frac{1}{3} \) of the students at Laguna Middle School as considered “socioeconomically disadvantaged.” Based on our findings, there is sufficient data to state that a need exists among middle school-aged children to increase fruit and vegetable consumption. Therefore, we propose to implement an awareness campaign and possibly a program or intervention at the middle school with the goal of increasing the consumption of fruits and vegetables among this specific population.
Nutrition Problem:
The Healthy People 2020 objects NWS-15.1 calls for the increased consumption of fruits and vegetables to the diets of the population aged 2 and over. Inadequate fruit and vegetable consumption is widespread throughout the United States: USDA data shows that 15.9% of CA population aged 2 years old and over meet the current vegetable recommendations. Additionally, 27.8% of CA population aged 2 years old and over meet current fruit recommendations. Most children in San Luis Obispo county (28%) do not consume the recommended intake of fruits and vegetables on a daily basis. A diet high in fruit and vegetable consumption is important for optimal child growth, weight management, and chronic disease prevention.

Parameters:
Community:
The focus community is students at Laguna Middle School in San Luis Obispo, CA. The middle school consists of approximately 670 seventh and eighth grade students with 34.1% of the students falling into the category of “socioeconomically disadvantaged”. Out of the student population, 27% are eligible to receive a free lunch from the National School Lunch Program while an additional 7% of the students qualify to receive a reduced-price lunch (Laguna Middle School: 2012-2013 School Accountability Report Card [SARC], 2013-2014). The majority (61%) of students are white, with the next largest racial group being Hispanic/Latino (28%). (Laguna Middle School, 2014). Several community-based organizations, such as the Food Bank Coalition of San Luis Obispo County, have been working to alleviate hunger and increase accessibility to fresh produce in the San Luis Obispo county community, but little data exists about middle school aged children and their consumption of fruits and vegetables.

Assessment Purpose:
The purpose of this assessment it to obtain information about middle school-aged children and their consumption of fruits and vegetables, as well as correlate those findings with students at Laguna Middle School in San Luis Obispo, CA. With this information, we will determine if it is
appropriate and necessary at to develop an awareness campaign and/or nutrition-related program for the middle school.

**Target Population:**
Students at Laguna Middle School in San Luis Obispo, California

**Goals and Objectives:**
The primary goal of this community needs assessment is to identify if there is a need to increase the contribution of total fruits and vegetables to the diets of students at Laguna Middle School in San Luis Obispo, based on HP2020 NWS 15.1 objective (U.S. Department of Health and Human Services, 2016). The first objective is to identify if there are preexisting programs in place that provide students with access to nutrition knowledge, fresh fruits, and vegetables. The second objective is to identify gaps in the delivery of programs and services that provide fresh produce and nutrition education.

**Data Needs - Community and Background**
In order to complete a thorough needs assessment, research should include obesity rates of adolescents in San Luis Obispo County, existing programs directed towards adolescents that encourage fruit and vegetable consumption and promote nutrition-related knowledge, and participation rates of any of these programs.

**Data Needs - Target Population**
Focusing on the students at Laguna Middle School, data should be gathered regarding student demographics, socioeconomic status, access to nutrition programs at the school, and quality of any available programs.
Data Collection:

Community and Background Conditions:

According to UCLA Center for Health Policy Research (2015), the percent of overweight or obese adolescents in San Luis Obispo County increased from 23.6% to 26% between 2001 and 2012 (Wolstein, Babey, & Diamant, 2015). Obese adolescents have nearly an 80% chance of becoming an obese adult later in life (American Academy of Child and Adolescent Psychiatry, 2011). Specifically in San Luis Obispo County, a survey in 2009 found that 28% of teens consume five or more fruits and vegetables per day while nationally 20% of teens meet this same goal set by the CDC.

Additionally, research indicates that only 21.5% of children age 10-13 of all demographics and socioeconomic status in San Luis Obispo County eat five or more servings of fruit and vegetables daily (UCLA Center for Health Policy Research, 2012). The San Luis Obispo Unified School District states in their Wellness Policy that “nutrition education shall be provided as part of the health education program in grades K-9 and, as appropriate, shall be integrated into core academic subjects and included in before- and after- school programs and summer learning programs.” Furthermore, the policy states that, “such activities shall be integrated with nutrition education, state standards, and core curriculum goals,” (San Luis Obispo Unified School District Wellness Policy, 2014. However, nutrition education programs are lacking or only partially implemented in 60% of the schools in the district, and encouraging families through newsletters, homework assignments, parent-teacher meetings, health fairs, etc. are only “fully in place” in 33% of the schools (SLCUSD Wellness Committee Feedback, 2016).

At Laguna Middle School, 27% of the student population is eligible for free lunch determined by the National School Lunch Program criteria. In San Luis Obispo County as a whole, about 43% (14,700) school children receive free or reduced priced meals (CA State Department of Education, 2012a). These governmental programs under the new 2012 guidelines increase the requirement of fruits and vegetables to 2.5-5 cups and 3.75-5 cups per week, respectively (National School Lunch Program, 2013). However, there is still a discrepancy in meeting the recommended daily fruit and vegetable intakes for children in the United States.
Efforts were made to contact Kathy Martin, Director of Food Services at Laguna Middle School, to discuss current programs at the school, but she never responded to our inquiries.

**Target Population**

According to the 2012-2013 School Accountability Report Card for Laguna, 34.1% of enrolled students fall into the “socioeconomically disadvantaged” category, and poverty is the most significant predictor of nutrition status (Laguna Middle School: 2012-2013 SARC, 2013-2014). Insufficient data is available on the types of nutrition education the students receive at Laguna Middle School. It is known, though, that Mr. Morrow’s physical education classes do not have a nutrition or health-related component; there is an online “Basic Nutrition” handout available through the teacher’s website (Morrow, n.d.), but this information is not included in the class curriculum.

**Analysis & Interpretation:**

**Community Health Status:**

This data highlights the dramatic inadequacy of fruit and vegetable intake, which may have a correlation with the rising obesity rates throughout the county and nation. San Luis Obispo County appears to have better overall averages on obesity rates and fruit and vegetable consumption. However, the data still suggests that both categories can use significant improvement.
Linkage between health status and environment/community resources:
Several community organizations provide food assistance, but no data could be found on specific nutrition/food-related programs offered at Laguna Middle School. While San Luis Obispo does have better consumption of fruits and vegetables according to the CDC’s survey, the small percentage (28%) of the population that is meeting the CDC’s recommended intakes is still less than adequate. This large disparity is a cause for concern because of the preventive effects fruits and vegetables have on chronic diseases. As a result, it is critical to increase the contribution of total vegetables to the diets of the target population to reduce the risk for developing chronic diseases in the future, promote healthy weight maintenance, and help establish healthy eating behaviors for the children that they can carry into adulthood.

Resources and Services:
Existing resources for improving the contribution of fruits and vegetables in the diets of people in San Luis Obispo County aged 2 years and older include:
- CalFresh: Food Bank Coalition of San Luis Obispo County allows anyone to pick up a bag full of produce as well as a bag of dry goods (such as rice, beans, and bread)
School Gardens: 59 of the 80 schools in San Luis Obispo County (approximately 73%) have school gardens, these are used for a variety of purposes (Searching for Healthy Food: The Food Landscape in San Luis Obispo County, 2011).

Salad Bars in Schools: 62 schools (75% of public schools) have a salad bar (but not all of these are offered daily, some are only offered weekly or monthly) (Searching for Healthy Food: The Food Landscape in San Luis Obispo County, 2011).

Key Findings:
As of 2012, 21.1% of children in SLO County live in food insecure household (Children Living in Food Insecure Households, 2012). Approximately 34% of the students at Laguna Middle School are considered “socioeconomically disadvantaged” (Laguna Middle School: 2012-2013 SARC, 2013-2014). Poverty is the most significant predictor of nutritional status, and the fact that over one-third of the students at the middle school are living in those conditions may contribute to insufficient fruit and vegetable intake (Boyle & Holben, 2012). Based on our findings, there is sufficient data to state that a need exists among middle school-aged children to increase fruit and vegetable consumption. Therefore, we propose to implement an awareness campaign and possibly a program or intervention at the middle school with the goal of increasing the consumption of fruits and vegetables among this specific population.
References


SLCUSD Wellness Committee Feedback. (2016). Retrieved from:
http://nutrition.slcusd.org/nmd_alternation/assets/user_files/files/Summary%20of%20Responses,%20Wellness%20Committee.pdf


