

Community Assessment Project (50 points)

“Colorado County”

Morgan Sinclair | October 9, 2014 | NUTR 430: Community Nutrition

INTRODUCTION

Colorado County is located in the southeast portion of Texas, tucked neatly between Houston and San Antonio. Of the 20,752 people residing in Colorado County, 5.8% are under the age of five, and 23.0% are under the age of eighteen¹. Currently, this population is suffering a nutrition-related problem due to lack of physical activity in juveniles, with only 27% of adolescents being physically active². There are a variety of contributing factors that impact this issue, which could be resolved with implementation of education and programs as well as awareness of the benefits from regular exercise.

BENEFITS OF PHYSICAL ACTIVITY

When adolescents receive adequate amounts of daily physical activity, not only does their overall health improve, but also cardiorespiratory performance increases³ and BMI averages stabilize to an appropriate range for school-aged children⁴. Considering the implementation of organized and non-organized physical activity, an adolescent's physical, cognitive, and social development is positively supported alongside improvements in their locomotor skills, manipulative control, and stability⁵. These factors conclude that time spent being active is a contributing factor to the overall positive health of the adolescent population.

CONTRIBUTING FACTORS

There are several elements that contribute to participation in physical activity or access to physical activity, including demographic components such as family income and race⁶.

Additional factors that are influenced by the built environment, the environmental structures that encourage or discourage healthy eating and physical activity, include a lack of the following:

food availability, recreational facilities, the ability to walk to areas such as a gym or park, and the amount of available green space. The absence of these factors prevents children from getting the proper amount of exercise needed to live a healthy, active lifestyle.

Income

In Colorado County, 16.8% of the population falls below the poverty line¹. Data from the Department of State Health Services states that those with an income less than \$25,000 or ranging from \$25,000 to \$49,900 have a higher disposition to physical inactivity than those that are in the middle-upper class, making \$50,000+ annually⁷. In general, low-income areas are more susceptible to inadequate facilities that promote exercise. Poverty-stricken areas contain parks and recreational facilities, which are often the only place for children to exercise outside of school, but are not held up to the same standard as community centers in higher-income areas⁸. Centers in low-income areas have lower quality in facilities, amenities, and aesthetics, as well as fewer options of programs⁸. It is suggested that centers with lower aesthetics, due to drug use, graffiti, and broken equipment, may hinder children's usage of the provided space⁸.

Race

Colorado County is made up of 13.3% African Americans and 27.9% Hispanics or Latinos. In alignment with the Department of State Health Services, those who are Black and/or Hispanic are at a higher predisposition for physical inactivity⁷. This also correlates to a University of Tennessee at Chattanooga (UTC) article, which concludes that, despite minute bias in the variety of races in the studied population, minorities such as Blacks and Hispanics are less physically active, even when outdoors, than non-Hispanic whites⁶. Another study revealed that race plays a

role in the preference of the type of physical activity chosen by adolescents. This was made apparent when it showed that female, non-Hispanic whites exhibited a greater interest in sports, such swimming and soccer, in comparison to Hispanic females and African American females⁹.

Recreational Facility Availability

Colorado County, as of 2011, has five recreational and fitness facilities². This is an increase from the four facilities in 2007², however the population is lacking proper fitness areas. According to a study, school facilities play a major role in the participation in physical activities. Research shows that, in schools that participate and encourage physical activity breaks during the day, as well as recess and PE, the rates of obesity were lowered and the physical activity rates were increased¹⁰. However, due to a higher focus on academics, physical activity and extracurricular activities are on a decline in several US school systems. The majority of a child's physical activity now occurs outside of the classroom, increasing the need for community and recreational centers⁸.

Food Availability

In 2010, 20.88% of Colorado County residents had limited access to grocery stores; of that percentage, 4.36% of children had low access to grocery stores². Further research demonstrates that low-income and rural areas tend to have limited access to healthier food options. These limited options of healthy foods may contribute to racial, ethnic, and socioeconomic disparities¹¹. When healthier foods are available, the prevalence of overweight and obesity decline. Food availability and physical activity work hand-in-hand to promote health and prevent diseases that without the counterpart would be more prevalent in the population¹². Healthy foods provide the

body with nutrients and energy that can be utilized during activity and lack of these healthy foods prohibits the body from performing at its best ability, thus deterring physical health.

Walkability

Neighborhoods are considered walkable by “mixed land use, well-connected streets, and high residential density¹³.” In low socioeconomic neighborhoods in Belgium, there was an association between neighborhood walkability and measure of moderate-to-vigorous physical activity in children. Those living in “walkable” neighborhoods were associated to increased levels of physical activity¹³. Columbus, Texas, and Weimar, Texas, are two cities located in Colorado County. The center of Columbus has a walkability score of 5 due to its scattered layout, whereas Weimar has a higher walkability score of 58, associated with its close-knit, easy-to-navigate community¹⁴. Zones with scores ranging from 0 to 24 are car-dependent, where most errands require a car, whereas vicinities with scores ranging to 50 to 69 are somewhat walkable, with the allowance of some errands to be done by foot.

Green Space

The amount of green space available in a community is a contributing factor to the percentage of individuals who are physically active, and the amount of performed physical activity. The only portion of land that is nationally protected in Colorado County is the Attwater Prairie Chicken National Wildlife Refuge. There is no record of parks in these counties, unless looked at within individual cities. The Colorado River runs through the county, and while it is accessible and available for recreational use, there are reports of frequent strong wind currents that hinder the use of the river for exercise. Access to green spaces and time being spent outdoors is positively

correlated with an increase in physical activity, control of weight status, and prevention of elevation in BMI. Promotion and preservation of green spaces serve as a means to address adolescent weight status and physical inactivity¹⁵.

CONCLUSION

Given these points, there are several nutrition-related problems prevalent in Colorado County. However, a pressing issue is the lack of physical activity among adolescents, whether in an organized setting, such as a school, or a non-organized setting, such as during leisure time. Low-income areas and a prevalence of racial minorities, in addition to lack of green space and recreational facilities, inability to walk, and deficiency in healthful foods, do not support the methods to have a physically active community. The most prominent method of intervention, as determined by community assessment and research studies, is the availability of opportunities to become physically active. This includes the implementation of physical activity intervention within a school, and access to space outside of school that promotes activity.

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