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Obesity in Monterey County

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### **Abstract**

Obesity has become a concerning health issue within the United States. In Monterey County, obesity is becoming an epidemic among children. In Monterey County in 2015, 48 percent of 7th graders were obese in comparison with 38.7 percent in California overall (Kids Data, 2015). Youth Fit 4 Life (YF4L) is a research-tested intervention program that shares a passion for improving the health of children by promoting healthy habits. The purpose of the program is to address childhood obesity and the psychological issues linked to it. After realizing the obstacles that staff were facing, it was important to create a website that provided additional support to conduct the program efficiently. The website provides videos and descriptions of the activities that must be conducted, in order to achieve the objectives of the program. Staff who utilized the website, found it to be a valuable resource.

*Keywords:* Youth, prevention, obesity, research-tested, fitness

### **Agency & Communities Served**

The Central Coast YMCA embraces the values of caring, honesty, respect, and responsibility with a mission to strengthen community through programs that develop youth, support healthy living and foster social responsibility (Central Coast YMCA, 2018). The agency addresses social justice in the community by offering programs and services for community engagement and health education. The main focus of the YMCA is to embrace physical and health education, behavioral health, fitness, recreational programs, and nutrition in the community (Central Coast YMCA, 2018). The organization addresses equality issues in the community by not declining any client. They provide financial assistance to make sure everyone has the same opportunities to take advantage of programs and services to live a quality life. .

The YMCA collaborates with local and national organizations and schools to bring after-school programs to the community. The YMCA's after-school program provides youth support, activities and a nurturing environment to give children security and the opportunity to discover themselves and their world (Central Coast YMCA, 2018). The after-school program follows a curriculum and hands-on learning where the children keep learning, growing, and thriving. During the after-school program, children get to be physically active by participating in the Youth Fit 4 Life program (YF4L). Youth Fit 4 Life is a research-tested intervention program that shares a passion for improving the health of children by promoting healthy habits. It's a physical activity program for children from 5 to 12 years old. The purpose of the program is to address childhood obesity and the psychological issue linked to it: depression, anxiety, social isolation, and bullying. YF4L believes in the importance of finding Physical Education (PE) fun. YF4L is designed to meet three specific goals: physical resistance, cardiovascular exercise and

nutritional and health topics centered in behavior life skills such as positive self-talk and group support.

### **Problem Description**

Obesity has become a concerning health issue among the United States. According to the Centers for Disease Control and Prevention (CDC), one in every five children in the United States from 6 to 19 years old are obese (CDC, 2018). In Monterey County obesity is becoming an epidemic disease among children. In 2015, Monterey County 48 percent of 7th graders were obese in comparison with 38.7% in California overall. Monterey County has significantly higher rates of obese and overweight children (Kids Data, 2015). The CDC defines obesity as having an excess amount of body fat. Health professionals use the Body Mass Index (BMI) screening tool to measure obesity. BMI has a strong correlation between weight and height. A child is considered overweight when they are between 85th and 95th percentiles on the chart. However, children above 95th percentiles are considered obese (CDC, 2016). Research indicated that those who are overweight in childhood are more likely to become obese in adulthood, and are at risk of having a chronic disease later on in their life (CDC, 2016). Therefore, decreasing the rates of obesity by creating healthy habits during childhood is essential.

### **Contributing Factors**

Childhood obesity has an association with food insecurity and hunger, lack of accessibility to healthy food and low physical activity. Children from food insecure households are more likely to be at risk and be overweight leading to potential obesity (Casey, et al, 2006). Low-income families are more vulnerable due to inadequate resources and insufficient resources in the community. The Food Research & Action Center (2015) states that the “coexistence of

food insecurity and obesity is expected given that both are consequences of economic and social disadvantage.” In Monterey County, 11.9% of the population are living below the poverty line. Salinas has one of the highest percentages of poverty around Monterey County with 17.2 % of the population in poverty (U.S. Census Bureau, 2017). Children from 12 to 18 years old experiencing food insecurity are 1.4 to 1.5 more likely become obese (Heather Hartline-Grafton, 2015). Families living below the poverty line are more likely to satisfy their cravings and hunger by eating fast food due to the accessibility and affordability.

Lack of physical activity among children puts them at risk of becoming overweight and developing cardiovascular diseases and obesity diseases. Unfortunately, it is hard for the United States population to maintain a moderate physical activity due to the development of the country. The amount of physical activity by humans is being negatively impacted by motorized transportation, limitation of recreational facilities and access to leisure activities such as watching TV and playing video games. In fact, they have a high prevalence rate of becoming overweight youth. Children from families of low socioeconomic status (SES) are more likely to be obese. Adolescents indicate that neighborhood safety is the biggest barrier that interferes with their physical activity (Unsafe to Play? Neighborhood Disorder and Lack of Safety Predict Reduced Physical Activity Among Urban Children and Adolescents, 2011). Low-income families have less physical activity time because they do not feel safe around the neighborhood in which to play.

Individual health is based on their quality choices. An individual's lifestyle is associated with the development of chronic diseases like obesity and diabetes. In California, more than half (58%) of the youth population consume sugary beverages every day, and 46

percent eat fast food twice a week (Babey, 2011). The environment where the child developed has a strong relationship to their consumption of food. According to Home and School Retail Food Environment Index (HERFEI) “Nearly 75% of California teens live and go to school in less healthy environments” (2016). If children have obese parents, it is a greater probability that the child will be obese. The importance of good healthy habits persists through the lives as adults.

### **Consequences**

Obesity is a life cycle, and it doesn't seem to stop. If a child is obese during childhood, there is a perception they will be obese during their adulthood. The World Health Organization (2018) stated “Childhood obesity is associated with a higher chance of premature death and disability in adulthood.” Everyday are more child deaths due to obesity. If a child is overweight, there is a high chance that their cause of death will be obesity.

Obesity can increase psychological issues in children. Children’s low self-image and self-esteem are often because of the way other children’s perspective them. They view themselves through the perceptions of others. The Academy of Pediatrics (2018) defines self-esteem as the way an individual perceives herself. A child's self-esteem is also shaped but their expectations of significant people in their life and how the child is treated by parents, friends or teachers. According to Ebbeling, Pawlak, and Ludwig (2002), obese children can develop a negative self-image as early as five.

Obesity has many negative impacts in health outcomes that leads to increased healthcare utilization. Obesity disease is one of the particular consequences of high healthcare costs. According to the article *The Health and Cost Consequences of Obesity Among the Future*

*Elderly* (2015) obese people spend more than \$39,000 more on health care than those of normal weight. (Lakdawalla, Goldman & Shang, 2005). Obesity is the most expensive diseases for medicare system.

### Problem Model

Contributing Factors	Problem	Consequences
Lack of accessibility to healthy food	Monterey County is facing higher rates of obesity among children	Life cycle of obesity
Food insecurity and hunger		Psychological issues <ul style="list-style-type: none"> <li>● low self esteem</li> <li>● Depression</li> <li>● Anxiety</li> </ul>
Low physical activity		Higher healthcare cost

### Improving the delivery of healthy habits curriculum for children

#### Capstone Project

Even though Youth Fit 4 Life is a great program, there are still a few improvements to make the program more effective. After observing different sites around Monterey County and checking with some coordinators, it was noticed that multiple sites were having problems with the staff at the sites. The Central Coast YMCA is constantly having new staff, and there is a lack of training. The YF4L program requires a minimum of six hours of hands-on training in order to run the program. Since the YMCA only provides two trainings per year; they still a few new members left out. Even though the YF4L is a very structured program, coordinators were having problems understanding the context of the program. The capstone project is to create a health education website for the YMCA staff as a support tool where the staff can have access to videos



and a basic description of the program.

### **Project Purpose**

The strategy to design a health education website will help staff to develop their health literacy. Staff will have access to information and will understand the health information for the YF4L program. Counselors will be capable, comfortable, and efficient in conducting the program increasing physical activity for the participants properly. Currently, the YF4L program is not being implemented consistently due to high rates of staff turnover and lack of training. The health education YF4L website will bring stability and proper implementation of YF4L program.

It is crucial to properly implement the YF4L to increase physical activity among children of Monterey County. Physical inactivity goes hand in hand with obesity. The CDC (2016) recognized that physical activity decreases the risk of developing diseases like obesity in youth. The CDC recommends for children and adolescents to have a minimum of 60 minutes of physical activity daily. Per accordance with the guidelines of the YF4L to be successful, it is vital to implement the program correctly. Having access to adequate information is essential in delivering the program.

### **Project Justification**

The strategies for designing a health education website are to provide practical training, so YF4L counselors can accurately deliver each activity. According to the Research-Tested Intervention Programs (RTIPs) (2006), the YF4L is a school-based program designed to increase physical activity among students. Research indicates that if YF4L is adequately implemented, physical activity will increase significantly. Having the easy to navigate and fast access to the health education website will be beneficial to both the YF4L counselors in the means of program

delivery and to the participants in the means of increased physical activity and reduction of obesity.

### **Project Implementation**

The Youth Fit For Life (YF4L) program is delivered by a trained after-school counselor with knowledge in physical education. The program's curriculum is presented to staff in a binder format; making it difficult for staff to follow the curriculum as they teach the YF4L program. The binder is divided into a 12-week program. The YMCA counselors must take a six-hour training before they can implement the YF4L 12-week program. However, the YMCA only offers two annual trainings for the YF4L program; the first training is offered in spring and the other in the fall. Unfortunately, the YMCA has a high turnover, which creates a barrier to training new staff throughout the year. Interns created a health education website for staff to offer a better understanding of the objectives of YF4L while they wait for the six-hour training. Also, the health education website allow staff to access the program as needed to implement the YF4L properly.

In February 2019, the Director of Healthy Living and the interns conducted a YF4L training for new staff members. During the training, new members participated in hands-on YF4L activities. All activities and games were filmed to use as part of the website tools. The purpose of the filming was to obtain visual content of how physical activities and games should be conducted for the children enrolled in the YF4L program. After the filming was completed, the YF4L website was built, by testing different web design tools to build a simple and structured website. The YF4L website is accessible and easy to navigate. The website consists of the YF4L program layout. Each section has a description and tips on how to implement each

section of the program. As well, videos were included and a brief description of activities conducted in the program for a better understanding of the program content. The goal of the videos was to incorporate a visual learning style to those who may need it. In collaboration with the Director of Healthy Living, interns were able to assess the success of the website and the usefulness of the proper implementation of the YF4L curriculum by conducting surveys all around the YMCA's in Monterey Country. A detailed implementation plan and timeline can be seen in the Scope of Work in Appendix A.

### **Expected Outcomes & Assessment Plan**

The creation of the website transmitted online health information. The goal of the project was to deliver online health information that engaged YF4L counselors. By involving after-school counselors into the YF4L program, the goal was to improve the implementation and effectiveness of the program. Also, the website allows YF4L counselors to gain confidence in how to deliver the program correctly. To measure the effectiveness and evaluate the impact of the website, a survey of six questions was created. It also includes a section for the staff to make any suggestions or comments on any possible changes that can be made to improve the website. The goal was to distribute the survey to four sites around Monterey Country. The YMCA staff are expected to get familiar with the website before taking the survey.

### **Project Results**

Due to miscommunication and lack of support, the website was not shared with all the staff. The interns visited five sites around Monterey Country and collected their emails. During the visit, the staff had the opportunity to hear the purpose and get an overview of the YF4L website. Because of the obstacles faced, the staff was only able to spend a few days using the

website. The ideal was to give them two weeks to get familiar and comfortable with the website. Even though the staff had a short time of period to respond to the survey, after the visits to the sites it was discovered that it was beneficial to visit them and explain to them the cause and purpose of the project.

After analyzing the results of the survey, it was discovered that the YF4L website created a positive impact on the program and staff. This can be seen in Figure 2 below. The survey illustrated that most of the staff found the website between easy or very easy to navigate, as illustrated in Figure 1 below. Staff also reflected that it was useful and a supportive tool to implement the program correctly, as shown in Figure 3.

Figure 1. Level of difficulty to navigate the website

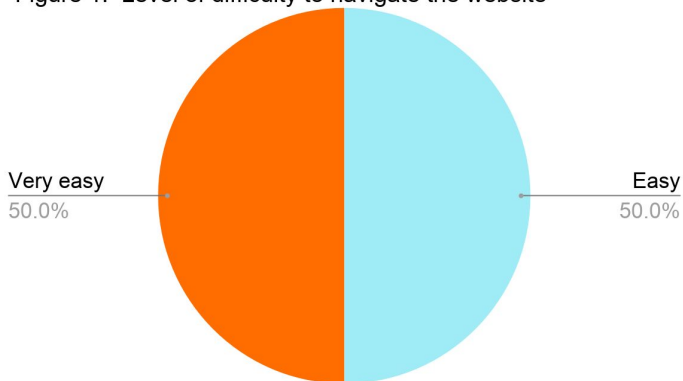


Figure 2. Do you find the website useful

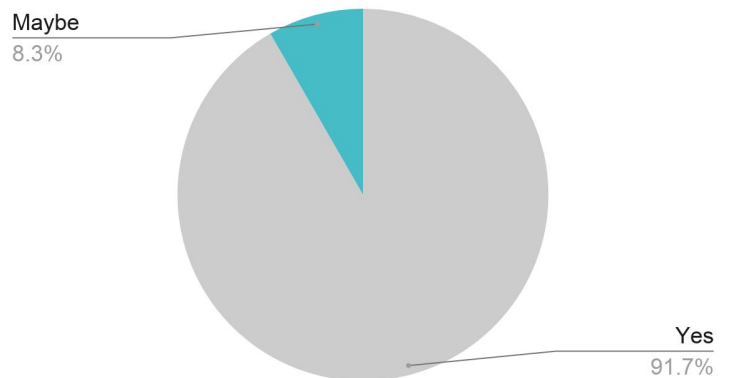
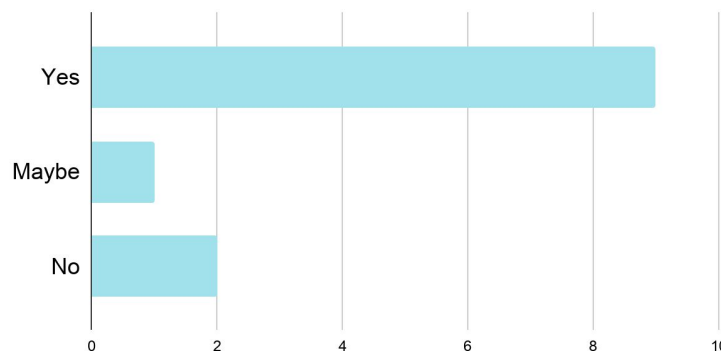


Figure 3. Do you think the Y4FL website has helped you implement the program



### **Conclusion & Recommendations**

The YF4L program is a research-based program designed to improve children's health by creating positive habits in which children are able to gain health education and be physically active. The program was developed after seeing the obesity epidemic in the United States. The program is known to reduce higher rates of obesity and improve healthy eating habits in children.

However, the YMCA was facing multiple obstacles in the implementation of the program. Therefore, a YF4L website was created to help the staff and the organization to maintain better sustainability of the program. The YF4L website created an impact in the program; staff and children are benefiting from the website. YMCA staff are doing the activities correctly with the help of the website and children are accomplishing the expected amount of physical activity daily.

It is recommended to continue with the website in order to support staff. Based on the survey's comments was found that staff needed more time to get familiar with the website. It was also discovered that the website was easier to navigate through the phone, which makes it ideal because the program is conducted outdoors. Now that the Director of Healthy Living has full access to the website, the website can be modificate for any future changes in the program.

**Personal reflection**

During my internship at the YMCA, I had the opportunity to expand my knowledge about the causes, consequences, and contributing factors of obesity in children. I was involved in working towards a solution to reduce the higher obesity rates in Monterey County. By interning at the YMCA, I was able to conduct the Youth Fit For Life Program through their school program. The program made me improve my professional communication and leadership skills and apply my knowledge gained in human services.

My capstone project impacted the staff, organization, and community. The developed of a website as a supportive tool is helping the YMCA staff to feel more confident about the program. As outcome, the staff is achieving to conduct the program correctly. Children in the after school program are being able to participate in the program and complete their physical activity hours, which is impacting the rates of obesity in the community. Throughout the process and development of the project, I faced challenges that made me cry but make me learn and grow as a professional. I faced miscommunication issues, discouragement, and lack of support from my mentor. However, my mentor taught me how to collaborate with a completely different personality than mine. I learned how to communicate and paraphrase things on the way that the other person feel they came up with the idea, when in reality it was my idea. The process of my project also show me how to advocate for myself. After all the stressful and frustrating process my capstone project was a success.

The developed of a website and implementation of the program is helping the reduction of obesity rates. However, to address these broader health issues, the YF4L program should be

implemented in schools and any facilities involved with communities and physical activity. For example, gyms or supportive health programs.

My advice for any future capstone student wanted to intern at the YMCA is not to intern there, and if are planning to intern there, they need to be open minded, advocated for themselves, and be prepared to pass three stressful semesters there.

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**Appendix****Scope of Work**

Activities	Timeline/ Deadlines	Supporting Staff
Conducted second training of YF4L	February 16th, 2019	Mentor, Interns and Staff
Film activities and games during the training	February 16th, 2019	Mentor, Interns and Staff
Research about the outcomes of being physically active in relationship with obesity	March 7th, 2019	Interns
Organize information for the YF4L education health website	August 15th, 2019	Mentor, Interns and Staff
Set up meetings with my mentor to discuss ideas to start developing the website	August 20th, 2019	Interns
Edit and upload videos to computer	August 27th, 2019	Interns
Make a youtube channel and upload videos to youtube	September 4th, 2019	Interns
Research on how to create a successful educational health website	September 4th,2019	Interns
Seek outside sources to assist with the website	September 20th-30th, 2019	Mentor, Interns and Staff
Launch YF4L website	October 17th,2019	Intern and mentor
Website introduction to mentor	October 15th,2019	Mentor, Interns and Staff
Create survey to measure the effectiveness of the website	October 10th, 2019	Interns
Visit different sites around Monterey County to evaluate	November 14-21,2019	Interns

the website		
Analyzed data	November 25-29, 2019	Interns
Report results to mentor	December 2, 2019	Interns and mentor