

Fighting Obesity in Children for Better Futures

The program is aimed to promote positive change towards healthy eating and active lifestyles to improve or maintain the health of children and their families to help prevent obesity and related complications

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2. Table of Content

1. Introduction

a. Fighting Obesity for Better Futures

b. This program is to promote positive change towards healthy eating and active lifestyles to improve or maintain the health of children and their families to help prevent obesity and related complications

2. Table of Contents

3. Needs Assessment

a. Secondary

4. Rationale

5. Mission Statement

6. Goals & Objectives

7. Scope and Sequence

a. Intervention Plan

b. Job Descriptions

c. Intervention Calendar

d. Interventions

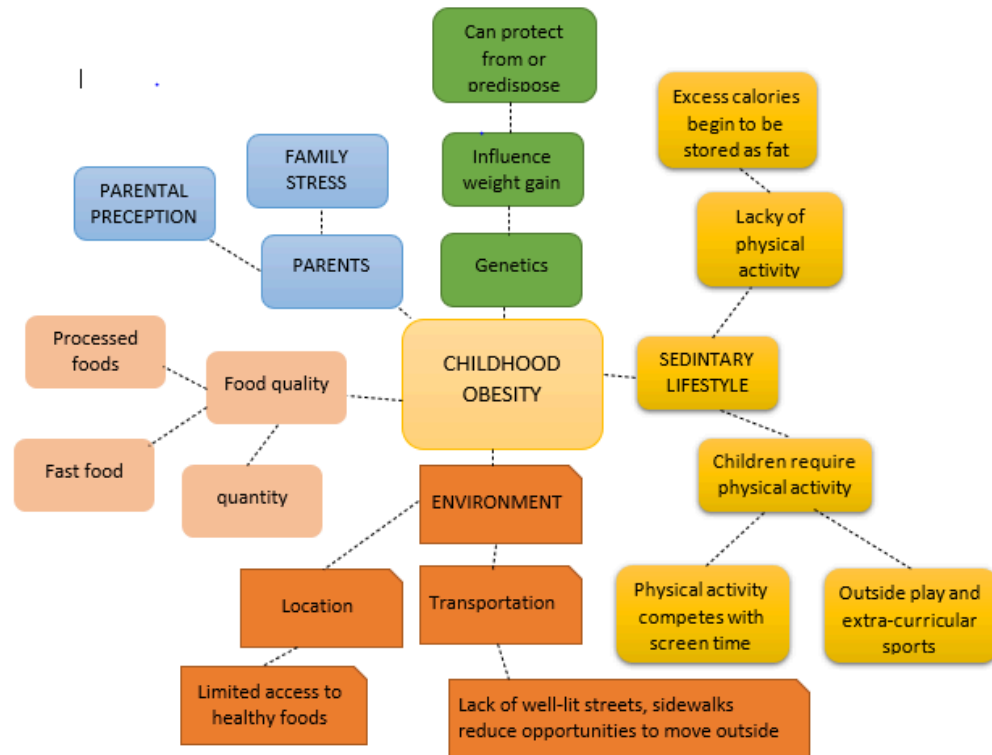
8. Budget

9. Marketing Plan

10. Works Cited Page

3. Needs and Assessments

Step 1: Concept/Mind Mapping



Step 2: Purpose and Scope of the Needs Assessment

The purpose of our needs assessment is to find the best method to help children avoid the dangers of obesity. Primary and secondary levels of prevention are what we are focusing on.

Step 3: Secondary Data Collection

Secondary Data Collection

“Extensive research has found the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) to be a cost-effective investment that improves the nutrition and health of low-income families — leading to healthier infants, more nutritious diets and better health care for children, and subsequently to higher academic achievement for students. As a result of the research documenting WIC’s effectiveness, Administrations and Congresses of both parties have provided sufficient funding since 1997 to ensure that WIC can serve all eligible low-income pregnant women, infants, and young children who apply for it.”(Carlson & Neuberger, 2021)

“Learn how to get nutritious food for yourself and your family through SNAP (food stamps), D-SNAP, and WIC for women, infants, and children. Apply for school meals for your kids and supplemental food for seniors” (Food assistance, 2020)

“Among non-Hispanic white children and adolescents, the prevalence of obesity increases as income decreases, yet the majority of non-Hispanic white children and adolescents who are obese do not live below 130% of the poverty level. In fact, overall, the majority of obese children do not live below 130% of the poverty level. All boys and girls and non-Hispanic white and non-Hispanic black girls in highly educated households are less likely to be obese compared with their counterparts in households where the head has less than a high school degree.” (Obesity and socioeconomic status in children and adolescents: United States, 2005-2008,n.d.)

“Approximately 1 in 5 children and adolescents in the United States aged 2 to 19 years is obese (1). Although 2011–2012 data from the National Health and Nutrition Examination Survey (NHANES) illustrates that obesity among preschoolers has significantly decreased from previous estimates, racial/ethnic and socioeconomic disparities in childhood obesity persist (1,2). The etiology of childhood obesity is multidimensional and includes familial, organizational, and societal factors”. (Community stakeholders' perceptions of barriers to childhood obesity prevention in low-income families, Massachusetts 2012-2013, 2019)

“Family can be the seedbed for a physically active life. (7,8) Studies show that parents are particularly important as models, encouragers, and facilitators of physical activity in children and adolescents. Their roles include everything from buying sports equipment and taking kids to practice to paying fees and doling out praise. (9,10) Other important factors in raising active children include paternal activity levels and positive reinforcement, maternal participation, sibling involvement, time spent outdoors, and family income” (Environmental barriers to activity, 2016)

“Parks and green spaces are another example of the built environment that contributes to the health of children. Research increasingly suggests that children benefit from the opportunity to play outdoors, where they can explore and enjoy natural environments. Planning parks near residential areas — and making sure that the parks include attractive landscaping, well-designed amenities such as playgrounds and sports facilities, and safe routes leading to and from them – is an invaluable strategy of community design that is healthy and nurturing for children”. (CDC - Healthy places - Children's health and the built environment, 2009).

“Research shows that lack of access to healthy foods is a major contributor to the country’s growing obesity epidemic and only further emphasizes the importance of accessibility to healthy food options. The CDC defines “overweight” and “obese” with a range of body mass indexes (BMIs); an adult who has a BMI between 25 and 29.9 is considered overweight, and an adult who has a BMI of 30 or higher is considered obese” (Jacobson et al., 2015, p. 01).

“Parents, guardians, and teachers can help children maintain a healthy weight by helping them develop healthy eating habits and limiting calorie-rich temptations. You also want to help children be physically active, have reduced screen time, and get adequate sleep.” (Tips to help children maintain a healthy weight, n.d.)

“Among children with overweight or obesity, parent-perceived stress was associated with fast-food consumption and physical activity. Parent-perceived stress was associated with child %BMIp95 among children in low-income households and non-Hispanic black children. Obesity interventions should consider parent-perceived stress and potential differences in the nature of stress experienced by parents of different racial/ethnic and socioeconomic backgrounds.” (Baskind MJ, 2019)

“Only one in four Chinese children perceived as overweight by their parents received treatment for their weight problem. Given that overweight/obesity in childhood tracks into adulthood and many parents did not intervene despite perceiving an overweight problem in their child, interventions for childhood obesity need to extend beyond parental perception of children's weight status.” (Éadaoin M Butler, 2019)

“Convenience foods, such as frozen dinners, salty snacks, and canned pastas, can also contribute to unhealthy weight gain. Some children become obese because their parents don't know how to choose or prepare healthy foods. Other families may not be able to easily afford fresh fruits, vegetables, and meats.” (Roth, 2016)

“The 2013 global statistics on prevalence of obesity and overweight indicate that in 2013, 23.8% of boys and 22.6% of girls in developed countries, and 12.9% of boys and 13.4% of girls in developing countries were classified as children with obesity. Childhood obesity increases the risk of serious health problems including hypertension, dyslipidemia, and insulin resistance, has negative effects upon psychosocial factors such as self-esteem, and is associated with increased adult mortality” (Vlaev et al., 2021)

“According to, the most recent data available from the National Health and Nutrition Examination Survey revealed that 17% of children aged 6–11 years were obese.” (Hawkins & Linvill, 2010)

“The corresponding figure for children aged 12–19 years was 17.6%. Current figures represent a nearly 300% increase in childhood obesity since 1979.” (Hawkins & Linvill, 2010)

“The prevalence of childhood obesity varied substantially across geographic areas, with the Southcentral regions of the US having the highest prevalence ($\geq 18\%$) and the Mountain region the lowest prevalence (11.4%). Children in West Virginia, Kentucky, Texas, Tennessee, and North Carolina (adjusted prevalence $>18.3\%$) had over twice the odds of being obese than their Utah counterparts (adjusted prevalence = 10.4%).” (Singh et al., 2008)

“Community factors. The most important community-level barrier reported by 19 (49.0%) stakeholders was the lack of safe neighborhoods. Safety concerns, including high traffic areas, unsafe sidewalks, and fear of violence, were all mentioned as barriers preventing children from going outside to play (Table 2, quotes 13, 14). Sixteen stakeholders (41.0%) across all sectors also described lack of transportation as a barrier. Although afterschool programs and sports clubs were offered free, stakeholders reported that families cannot attend as long as they lack consistent access to transportation (Table 2, quote 15, 16). Finally, 15 stakeholders (39.0%) across sectors mentioned that low-income families do not have access to affordable, healthful food (Table 2, quotes 17, 18).” (Community stakeholders' perceptions of barriers to childhood obesity prevention in low-income families, Massachusetts 2012-2013, 2019)

“Implement comprehensive programmes that promote the intake of healthy foods and reduce the intake of unhealthy foods and sugar-sweetened beverages by children and adolescents. Recommendation 1 sets out a range of interventions that discourage the consumption of unhealthy foods, including taxing sugar-sweetened beverages and restricting marketing of foods and non-alcoholic beverages to children. Recommendation 1 also includes interventions that promote the consumption of healthy foods, such as increasing accessibility and affordability of fruit and vegetables and banning the sale or provision of unhealthy foods and beverages in schools and child-care centers. Taxes on unhealthy products and subsidies on healthy products require implementation through law. Many of the other interventions, particularly those that seek to prohibit or compel certain actions, should be implemented as binding law. Although some of the interventions, such as interpretive front-of-pack labeling schemes, could be implemented through non-binding policies and programs, this approach is more susceptible to industry non-compliance and is often criticized for diverting attention and resources from more effective, legally-binding regulations.” (Ending childhood obesity: The role of laws and regulations, 2016)

“Family history and structure. Within this subdomain, parent education and ethnicity–cultural background were mentioned by most stakeholders as affecting parents’ engagement or participation in childhood obesity prevention. Specifically, 32 (82.0%) out of 39 stakeholders, discussed parent education as a barrier, and 13 (33.3%) out of 39 stakeholders referenced ethnicity–cultural background as shaping cultural norms that could negatively affect parents’ engagement in obesity prevention. The main cultural influence cited by 10 (26%) of 39 stakeholders representing all sectors was Hispanic families’ belief that high body weight is healthy. Participants reported that parents whose families recently immigrated to the United States were proud of their “chubby” children, and saw them as evidence of their ability to provide food (Table 2, quotes 1, 2); this concept is important because many families faced food insecurity in their home countries. Five stakeholders (13.0%) mentioned that grandparents’ beliefs that heavy babies are healthy also greatly influenced families’ daily routines (Table 2, quotes 3–5). Nine stakeholders (23%) from schools, afterschool programs, and health care discussed parents’ language and literacy needs, which are examples of parents’ ethnic–cultural background and education (Table 2, quotes 6–8). Although stakeholders reported addressing these needs by providing bilingual materials and a translator during appointments, these efforts were described as insufficient for fostering parent engagement (Table 2, quote 9).” (Community stakeholders' perceptions of barriers to childhood obesity prevention in low-income families, Massachusetts 2012-2013, 2019)

Step 4: Analyze Data & Identify the Risk Factors

PRECEDE-PROCEED Phase 2: Epidemiological Assessment

1. The underlying causes of these problems, such as environmental, behavioral, and genetic factors (Fertman & Allensworth, 2010).

The health issues that are identified as the most important to change for this target population are Hypertension, dyslipidemia, insulin resistance, diabetes, and physiological problems.

2. Take each health issue(s) and identify the underlying causes (McKenzie, Neiger, & Thackeray, 2013, p. 102):
 - a. Environmental Factors—(i.e. stressful working conditions, no control over working conditions, toxins, etc.) Time constraints, income, available food options, transportation.
 - b. Behavioral Factors— Poor diet, lack of physical activity, parental perception
 - c. Genetic Factors—Family history and generic influences.

3. Identify which problem(s)/health issue(s) with their underlying causes (factors) are most important and changeable using the Prioritizing Matrix.

	MORE IMPORTANT	LESS IMPORTANT
MORE CHANGEABLE	<ol style="list-style-type: none"> 1. Prevent childhood obesity rates among children in the united states 2. Reduce the number of children who exceeded minimum BMI standards for the height and age 	<ol style="list-style-type: none"> 1. Change parents' perceptions on childhood obesity 2. Educate parents on sedentary behaviors associated with screen time.
LESS CHANGEABLE	<ol style="list-style-type: none"> 1. Influence public policy to change the built environment to create communities more conducive to healthy lifestyle. 2. Identify and educate how genetics influence children's predisposition to obesity. 	<ol style="list-style-type: none"> 1. Provide communities with healthy food options within communities such as farmers markets and grocery stores. 2. Collaborate with schools to incorporate an increased physical activity regiment that can be utilized in and out of the school.

4. Identify the following from Steps 1-4:
Target Population-Children with obesity in the United States
Setting- Community
Health Issues-Obesity

Step 5: Assess the Target Population (*Ecological Assessment*)

Identify the Target Population: *Children with Obesity*

1. Predisposing Factors

- a. List all of the factors that promote and detract from *motivation* to change-
 - i. **Intrapersonal**
 - Perceived stress beginning with parents can transfer to children. This results in them losing self awareness of what healthy behaviors are or not identifying their behavior to lead to a negative health outcome. (Baskind MJ, 2019)

- Perceived enjoyment of others in a natural environment. This can encourage physical activity and can lead to a positive health outcome. (Jacobson et al., 2015, p. 01)
- Characteristics developed through participation in organized sports and athletics can result in a feeling of self efficacy that can lead to healthier lifestyle choices.(Environmental barriers to activity, 2016)
- Beliefs about food and physical activity can either motivate or detract from a child's ability to make healthy food choices. (Roth, 2016)

ii. Interpersonal

- Relationships with parents and schools help with positive health behaviors. physical activity can be directly correlated to school and what parents do. In the household parents are models and facilitators of physical activity. (Tips to help children maintain a healthy weight, n.d.)
- Caregiver perceptions of what healthy weight is can lead to obesity in children. In some cultures it is believed that a heavier infant correlates to higher levels of health and wellness. ("Community stakeholders' perceptions of barriers to childhood obesity prevention in low-income families, Massachusetts 2012-2013," 2019)
- Media can distract parents and obese children from healthier choices by shortening preparation time due to time spent on electronics or creating a feeling of distaste for doing anything other than the entertainment offered.(Tips to help children maintain a healthy weight, n.d.)
- Negative food choices can result from child neglect most often from the parents due to lack of attention to the health, physical and nutritional needs of a child. (Ending childhood obesity: The role of laws and regulations, 2016)

2. Competition

- a. Identify all competition variables in relation to the health issue(s) and underlying causes.
 - The alternative to choosing healthy behaviors and the biggest barrier to prevent obesity is the accessibility of unhealthy foods. Within the target population, fast food or processed foods are more available than whole foods. This can be because of access to grocery stores and lack of awareness of healthy food options. (Jacobson et al., 2015, p. 01).
 - Excessive Screen time (Tips to help children maintain a healthy weight, n.d.)
 - Sedentary life

- Parents that are not physically active or do not do physical activities with their children.

3. Enabling Factors

- a. Identify all of the societal factors that can act as a barrier or facilitator to detract or promote change
 - i. Institutional
 - Income status can negatively affect the ability to make healthy food choices. (Roth, 2016)
 - Cultural norms
 - Social Norms
 - Other individual living in the same household
 - ii. Community
 - Lack of public transportation can inhibit people from traveling to grocery stores
 - Lack of community outreach programs. ("Community stakeholders' perceptions of barriers to childhood obesity prevention in low-income families, Massachusetts 2012-2013," 2019)
 - Religion influences positively influence individuals about healthy behavior
 - Accessibility to health care
 - Accessibility to safe housing with playgrounds and parks
 - iii. Public Policy
 - Laws that prevent or force food companies to label portions within foods. An example of this is showing the sugar quantity per serving in a drink container. ("Ending childhood obesity: The role of laws and regulations," 2016)
 - Health information resources
 - Child protective services

4. Reinforcing Factors

- a. Identify all of the rewards or feedback the target population receives which encourage or discourage the continuation of the behavior.
 - i. Intrapersonal factors the target population receive are the negative perception from outcomes from obesity. Intrapersonal rewards from interventions can be behaviors that make them feel better and lead to a healthy life.
- b. Identify specific people around the target population who support/hinder their efforts both positively and negatively?

ii. Parents are primary factors that can influence and serve as the biggest barriers and supporters to these health behaviors. Their perceptions and feelings directly affect the health behavior of their children. (Tips to help children maintain a healthy weight, n.d.)

5. Ecological Perspective

- a. From the data you have collected on the target population, identify which levels of influence are of most benefit for developing interventions in the Scope & Sequence.

In accordance with the data the most common thread leading to this negative health behavior are interpersonal relationships with the child and the parent. Interventions at this step could have the largest impact. Interventions should come in the form of education on three different criteria to promote a healthy lifestyle. First is perception of the parents and awareness of the negative health outcomes of the child's obesity. Parents need to understand what obesity is and how it occurs and can be prevented.

Second, parents need to be aware of their influence on physical activity. Third intervention can come in the form of education on healthy choices in foods. This can include avoiding processed and fast foods. Parents should be taught how to abide by a whole foods healthy diet. ("Community stakeholders' perceptions of barriers to childhood obesity prevention in low-income families, Massachusetts 2012-2013," 2019)

Step 6: Assess the Settings & Resources

PRECEDE-PROCEED Phase 4: Administrative & Policy Assessment

Setting Assessment:

1. Identify the demographics of the setting

- a. *Population, geography (parks, stores, health care, schools, etc.), nationality, ethnicity, socioeconomic statistics, religion, etc.*

In the United States there are several studies that show that socioeconomic status has a correlation with childhood obesity. The numbers are skewed showing that children who grow up in low income families have a higher likelihood to be obese. In addition to socio economic status children who grow up in households where parents do not have college degrees have a higher prevalence of obesity.

- b. *Identify any public policies in place that influence the target population.*

There are several federal government, state and municipal policies in place to eliminate obesity in children. Of the policies siw th women infant children (WIC) program backed by the United State Department of Agriculture. This program

reaches out to low income families to promote health behaviors such as breastfeeding. This program has several goals and among them are breastfeeding and education on nutrition.

2. Identify all of the resources in the setting the target population either accesses or can access.

- a. This includes the availability, accessibility, and affordability of personal and community resources which facilitate the performance of an action.

Immediate Food Assistance
Food Stamps and Meals (SNAP Food Benefits)
WIC Nutrition Program for Women, Infants, and Children
Free School Meals for Children
YMCA
Boys and Girls Club
Play 360
Girls on the Run
Five a Day Works ("Food assistance," 2020)

- b. What is available, accessible and affordable to the target population?
 - i. Are they using them why or why not?
They are available for the target population and are tailored to meet the needs of the target population. Many of these programs are formulated to be accessible to a low income family. Other programs can be utilized virtually or in any location.

3. Identify all of the health promotion programs presently available to the priority population in that setting.

- National Collaborative on Childhood Obesity Research (NCCOR)
- Early Childcare and Education Obesity Prevention Program
- Nemours Children's Health System (Nemours)
- Eat Smart. Play Hard
- Fit WIC
- Robert Wood Johnson Center to Prevent Childhood Obesity

4. What effective intervention strategies (activities) are available to address the issue(s)?

- Clinical-community collaboration to improve physical activities counseling for children and body mass index screening
- The family enrolls in healthy weight programs, gaining the knowledge and skills needed for healthy eating.
- Increasing access to physical activities in schools and communities
- Providing practical suggestions to encourage healthy eating and exercises
- Policy analysis and coordination with community stakeholders, including policymakers, to create healthier environments in schools and communities

5. From all of the information collected about the setting explain your rationale as to if the setting has the capabilities and resources available to develop and implement a comprehensive health promotion program.

The setting has enough resources available to implement health promotion programs.

Programs Outside of the Setting:

1. Research and identify any programs in other settings similar to either the health issue(s), target population, or setting.

➤ Program Title:

(WIC) Women, infant, and children

➤ Where is it located and offered?

It is available in all 50 states, 34 Indian tribal organizations, American Samoa, District of Columbia, Guam, Commonwealth of the Northern Mariana Islands, Puerto Rico, and the Virgin Islands. 21 states across America

➤ What was the need that drove this program?

The absence of health education and food access for low income families. Brief description of the program and its purpose. The purpose of WIC is to provide nutrition education, breastfeeding support, and referrals to health care and other social services. WIC also provides food to low income families.

➤ How effective is the program (results)?

WIC has been proved to be effective. It has been proved that WIC supports more nutritious diets and better feeding practices. Also WIC has contributed to healthier food options in low-income neighborhoods.

➤ What specifically made this program work and function?

What makes this program work and function is because first it is a very well planned health organization and second because it is founded by the government and other private corporations that provide a big budget. (Carlson & Neuberger, 2021)(WIC Program)," n.d.)

2. Program Title:

Ending Childhood Obesity (ECHO)

➤ Where is it located and offered?

Mumbai, Iran

➤ What was the need that drove this program?

Iranian national study performed in thirty provinces, prevalence of overweight, obesity, and abdominal obesity was reported to be 9.7%, 11.9%, and 19.1%, respectively, in children and adolescents aged 6–18 years (Sayyari et al, 2017)

➤ Brief description of the program and its purpose.

The program is divided in two parts: a population approach and an individual approach. The population approach considers the life period to suggest changes and prevent weight gain,

such as breastfeeding promotion, the establishment of standards for school snacks and meals, the implementation of programs for promoting physical activity and reducing sedentary behaviors in families and their children. The individual approach offers treatment to help children overweight with the help of trained physicians and dieticians in public health centers.

- How effective is the program (results)?

The IRAN-ECHO program is successfully being conducted in six provinces, and will be considered in all provinces in the near future. The quasi-experimental survey comprised 7149 students and showed that the knowledge about the low nutritional value of unhealthy snacks such as potato chips, puffs, industrial juices, and carbonated drinks was not appropriate.

- What specifically made this program work and function?

The research provided enough information from inside the setting to sustain the program and conduct the interventions appropriately.

3. Program Title:

Childhood Obesity Prevention for UK South Asian Communities

- Where is it located and offered?

UK South Asian

- What was the need that drove this program?

The growth obesity rate in the target population

- Brief description of the program and its purpose.

The program consisted of two broad processes; increasing children's physical activity levels through school, and increasing skills of families through activity-based learning. The purpose was to use local resources to develop prevention interventions for UK South Asian primary school-aged children. (Pallan et al., 2013)

- How effective is the program (results)?

The developed intervention is being evaluated in a major study and the intervention processes are being applied to other communities and tailored to local contexts.

- What specifically made this program work and function?

The program designed the intervention to be compatible with the community resource, and they used a framework to ensure a comprehensive approach.

Step 7: Identify the Program Focus & Validating the Need

1. Identify the following:

Target Population:

Children with obesity in the United States

Setting:

In the household focusing on parents interpersonal relationships

Health Issue(s):

Parents' are the primary influence on a child's health. Through lack of knowledge, false perceptions, and lack of physical activity childhood obesity can occur.

Level(s) of Prevention:**Primary:**

Childhood obesity can start from early childhood development. In this case, to prevent the health issue before it happens we will target parents. First level of prevention will be to reach out to new parents and educate them on infant health nutrition and health behaviors for a developing child. An example of this can be a seminar on the importance of breastfeed and physical activity.

Secondary Prevention:

Seek out to parents with children suffering from obesity through school, church, and community organizations to raise awareness and educate on causes and reduction of obesity.

Tertiary Prevention:

Conduct the implementation of programs for promoting physical activities and reduce sedentary behavior, and education for managing health problems caused by obesity . Create a consolidated list of institutional organizations and connect them with the target population through community organizations, schools, and churches. This consolidated list will be an interactive matrix listing programs, contact info and eligibility. This can be via social media, printed media or pamphlets given out in communities most affected. Social workers can be given this consolidated list as an asset to give to the target population. Eligibility can be one axis of the matrix and condition can be another with programs as the content.

2. Is there a need for a *comprehensive* health promotion program in the setting with the target population?**a. Explain the specific need from different levels of influence.**

There is a need for a comprehensive health promotion program because there are several levels of interventions already available. Our intervention focuses on using programs and ensuring they are being delivered to the target population.

3. Is the health issue(s) something that can be solved in a reasonable amount of time?

The health issue cannot be solved in the short term however can be solved through several years. Childhood obesity is something that does not occur overnight but occurs through the life of an individual. Interventions are targeted to be long term solutions with long term results.

4. Can the health issue(s) be best solved through a health promotion intervention, or a comprehensive health promotion program?

In the case of childhood obesity both comprehensive health promotions programs and health promotion intervention can be successful in improving this health behavior. Utilizing both will only optimize the intended outcome.

4. Rationale

A Rationale of Fighting Obesity in Children for Healthier Futures in United States

Childhood obesity is one of the most alarming public health disparities. It is also the leading cause of other chronic diseases that affect millions of people every year. The World Health Organization (WHO) recently has stated “Obesity has reached epidemic proportions globally, with at least 2.8 million people dying each year as a result of being overweight or obese”. ("Obesity," 2021). Children with obesity have a higher risk of suffering from diabetes, musculoskeletal disorders, some cancers, hypertension, psychological diseases, and cardiovascular diseases (strokes and heart diseases). ("Obesity and overweight," 2021). Cardiovascular diseases were the leading cause of death in 2019. ("top 10 causes of death," 2020).

In the United States childhood obesity is also a major problem that affects children and youth. According to the Center of Disease Control and Prevention (CDC) Obesity prevalence was 13.4% among 2- to 5-year-olds, 20.3% among 6- to 11-year-olds, and 21.2% among 12- to 19-year-olds. ("Childhood obesity facts," 2021). Children who have obesity are at greater risk of having obesity in their adulthood and suffer from chronic diseases such as type 2 diabetes, heart diseases and some cancer. ("Causes and consequences of childhood obesity," 2021). Like chronic diseases, mental health diseases in children with obesity have become a priority for physicians in the United States. In a recent study physicians and researchers had found that psychological factors and psychiatric factors (depression, anxiety, eating disorder, stress, body shape concerns, low self-esteem) are also associated with childhood obesity. ("Psychological aspects of obesity in children and adolescents," n.d.). According to the U.S. Health Promotions and Human Services the lack of physical activity is linked to approximately \$117 billion in annual health care costs and about 10 percent of premature mortality. ("Physical Activity Guidelines for Americans," 2019)

Children can become obese because of lack physical activity, nutrition and social-economic factors. This responsibility falls mainly on the parents and or caregivers. “Parents, guardians, and teachers can help children maintain a healthy weight by helping them develop healthy eating habits, limiting calorie-rich temptations, children be physically active, have reduced screen time, and get adequate sleep.” ("Help children maintain healthy weight," 2021). According to a study done by the National Center for Health and Statistic (NCHS). Children and adolescents living in households where the head of household has a college degree are less likely to be obese compared with those living in households where the household head has less education. ("Products - Data briefs - Number 50 - December 2010," 2019).

The program "Fighting Obesity in Children for Healthier Futures" plans on creating an intervention targeting parents. This intervention comes in three strategies. The three strategies will work together complementing each other. The health communication strategy utilized will be using posters and pamphlets to provide information on the specific negative health behavior,

variety of available interventions based on need, and posters/infographics aimed at behavior modification. Using the health belief model the intervention will have a three tiered approach. First give the target population information about the specific health behavior. In this case it is childhood obesity. Information includes identification of the behavior and short/long term health outcomes. Next a matrix of available outreach programs will be made available in a pamphlet. The intent is to provide a variety of interventions that allow parents to pursue an intervention that best meets their individual needs and lifestyle. The environmental change will follow through a mass media and social media approach, where will be included practical tips and professional informations of how to apply healthy concepts to the children lifes, as nutritional information and ideas of indoors and outdoors physical activities. Key markers of intervention types will be physical, social, educational and psychological. Lastly a behavior modification activity will be made to encourage lifestyle changes through healthy choices being recognized and rewarded. This will provide successes in making healthy food and lifestyle decisions and building self efficacy. With the cumulation of the activity, peer groups will be encouraged to keep meeting and supporting each other.

By the end of our intervention implementation, we will see an increase in awareness of childhood obesity and its causes. We will see the results by successfully delivering information to a minimum of 100 parents, and helping them be aware of the more than 50 organizations available to support them.

A childhood obesity prevention and treatment program has great potential for success in the United States for several reasons. First it targets the root cause of obesity in children and is versatile, so it can deliver the correct type of intervention based on the needs of individuals. Second, similar programs with the same target population have been successful, such as the Regional Nutrition Education and Obesity Prevention Center of Excellence which have conducted 28 programs directed to children (RNCE, 2014). The precedents of this program have shown to be successful, and the program is expected to deliver good results.

5. Mission statement

The mission is to promote positive change towards healthy eating and active lifestyles to improve or maintain the health of children and their families to help prevent obesity and related complications.

6. Goals and Objectives

1. First Goal: Increase the amount of physical activity in obese childre

Objectives:

- a. Convince 75 percent of the target population to increase physical exercise for at least 1 hour per day.
 - b. Enable parent's ability to participate in programs aimed at increasing physical activity in children like organized sports or group classes.
2. **Second Goal:** Increase the level of knowledge of nutrition and physical activity to parents in the target population.

Objectives:

- a. Enroll 30 percent of the target population in Nutrition classes.
 - b. Provide pre and post tests to parents engaged in classroom training and ensure at least 60% in test scores.
 - c. Obtain 75 %contact with provided pamphlets with parents of target population
3. **Third Goal:** Increase accessibility of whole foods to parents in our target population.

Objectives:

- a. Partner with local grocery stores to ensure that food delivery is available to 100% percent of the target population.
- b. Ensure that 75% of the target population purchases Whole Foods from programs provided by pamphlets.
- c. Make programs that help parents pay for quality food so that it is more available to them

7. Scope and Sequence

a. Intervention Plan

The three interventions will work together complementing each other. The health communication strategy that will be utilized will be using posters and pamphlets to provide information on the specific negative health behavior, variety of available interventions based on need, and posters/infographics aimed at behavior modification. Utilizing the health belief model the intervention will have a three tiered approach. First give the target population information about the specific health behavior. In this case it is childhood obesity. Information includes identification of the behavior and short/long term health outcomes. Next a matrix of available outreach programs will be made available in a pamphlet. The intent is to provide a variety of interventions that allow parents to pursue an intervention that best meets their individual needs and lifestyle. The environmental change will follow through a mass media and social media approach, where will be included practical tips and professional informations of how to apply

healthy concepts to the children's lives, as nutritional information and ideas of indoor and outdoor physical activities. Key markers of intervention types will be physical, social, educational and psychological. Lastly a behavior modification activity will be made to include posters and infographics. This will outline activities that will provide rewards for making healthy food and lifestyle decisions.

b. Job Description

Graphic Designer: The job includes developing concepts, graphics and layouts based on the campaign brief. Capture the target population's attention, with colors, fonts and images to deliver the right message. Ensure the concept is clear and visually appealing both in social media and print campaign artifacts.

Public Relations: The public relations specialist will work together with the graphic designer to build and maintain a positive image and message to the campaign. The professional will be in charge of writing press releases and other media communications, helping the campaign to better connect with the target population. To be successful in this job it's necessary to have a deep understanding of the campaign, marketing strategies, and excellent written and verbal communication skills.

Marketing: A marketing specialist should be a competent professional, smart and creative, that will work together with the graphic designer and public relations to build a strong campaign and assure it will achieve the target. The professional will be part of the development and execution.

The job includes conducting marketing research to find answers about the target population, habits and trends. Plan and execute initiatives to reach the target audience through appropriate channels (social media, e-mail, TV etc.)

Public Health Educator: The Public health educators will provide wellness information to the public about health and safety concerns specific to the parents community. The professional will work with other professionals in healthcare and the public health department to identify and address trends within a population. The Public health educator will inform the public about childhood obesity prevention measures, but also help to educate people about access to services and treatment.

Nutritionist: The nutritionist will provide professional advice on how to implement and maintain a healthy lifestyle. As a specialist in food and nutrition you will guide the target

population of the campaign into better eating and exercises. To succeed in this role, you will need to stay updated on the latest nutritional diets, research methods, and industry trends.

Physical Educator: The Physical educators will organize games and challenges that promote physical activity among children. Their goal is to develop motor skills and physical development among younger children and proper exercise and eating habits among older children to avoid overweight and produce a healthier lifestyle.

Community Outreach Coordinator: As Community outreach coordinators the professional will oversee the planning and implementation of outreach strategies. The coordinator will be primarily responsible for connecting people in the broader community by creating sponsorship agreements and cultivating relationships with businesses, individuals, and other relevant organizations.

Program Director: The Program Director will provide leadership to program and programming staff and oversee all aspects of the program development. The professional will be responsible for the training and daily supervision of all program staff, program locations, facility and fiscal management.

c. Intervention Calendar

Intervention Timeline	Monday	Tuesday	Wednesday	Thursday	Friday
Month 1					
Week 1	Needs assessment Investigation and collaboration	Discover priority population, Discuss effective strategies	Discover effective community communication	Produce communications	Initiate social media
Week 2	Contribute to building up of traffic on social media	Answer questions online, in person, over the phone and register participants for program	Answer questions online, in person, over the phone and register participants for program	Answer questions online, in person, over the phone and register participants for program	Answer questions online, in person, over the phone and register participants for program
Week 3	Start healthy incentive program with group kick off offering of incentives	Use social media to encourage action	Use social media to encourage action	Use social media to encourage action	Use social media to encourage action

	for success in desired behaviors				
Week 4	Meet as a group and discuss achievement/ offer incentives for positive behavior (Focus on activity)	Continue to offer ideas and support via communication methods	Continue to offer ideas and support via communication methods	Continue to offer ideas and support via communication methods	Continue to offer ideas and support via communication methods

Month 2					
Week 5	Meet as a group and discuss achievement/ offer incentives for positive behavior (Focus on activity)	Continue to offer ideas and support via communication methods	Continue to offer ideas and support via communication methods	Continue to offer ideas and support via communication methods	Continue to offer ideas and support via communication methods
Week 6	Meet as a group and discuss achievement/ offer incentives for positive behavior (Focus on diet)	Continue to offer ideas and support via communication methods	Continue to offer ideas and support via communication methods	Continue to offer ideas and support via communication methods	Continue to offer ideas and support via communication methods
Week 7	Meet as a group and discuss achievement/ offer incentives for positive behavior (Focus on diet)	Continue to offer ideas and support via communication methods	Continue to offer ideas and support via communication methods	Continue to offer ideas and support via communication methods	Continue to offer ideas and support via communication methods
Week 8	Meet as a group to celebrate success (Last day) and gather data kept from participants	Evaluate data gathered from participants	Evaluate data within community	Option to adjust programming	Record successes and failures.

d. Interventions

Health Communication Strategy

Health communication strategy for this intervention will be a pamphlet that provides a variety of community outreach programs that target the specific health behavior. The health belief model (HBM) will be utilized for this intervention. The strategy will target parents and first educate them on the susceptibility and risks of obesity in children. It will start by articulating short- and long-term negative health outcomes. This will make the health behavior more relevant. The second part of the strategy is a matrix of available community outreach programs. The intent is to provide a variety of interventions that allow parents to pursue an intervention that best meets their individual needs and lifestyle. Key markers of intervention types will be physical, social, education and psychological. With this matrix parents and public health workers will be able to conduct an assessment of their needs and pick the intervention that best suits them.

FIGHTING TOGETHER

CHILDHOOD OBESITY

FOR FUN AND HEALTHY FUTURES

INTERVENTION	AGE	ORGANIZATION	PHYSICAL	MONEY	PSYCHOLOGIC	EDUCATIONAL
Providing nutritious foods to supplement diets, information on healthy eating including breastfeeding promotion and support, and referrals to health care	0-10	Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) USDA-FNS		X	X	X
Provide educational programs and resources to low-income families.	3-18+	YMCA the Y: YMCA of the USA	X		X	X
Provides childhood education in low-resource communities through empowering them to build low-cost playgrounds as an extension on the classroom	1-18+	PLAY360 play360 - Improving Education One Playground At a Time	X		X	X
Providing safe and fun places for kids to grow and thrive. Provides programs focused on academics and health. Caring mentors that motivate kids to be successful	6-18	BOYS & GIRL CLUB OF AMERICA Boys & Girls Clubs of America - Providing millions of kids and teens a safe place to develop essential skills, make lasting connections and have fun. (bgca.org)	X		X	X
Inspire girls to be joyful, healthy and confident using a fun, experience-based curriculum which creatively integrates running	8-16+	GIRLS ON THE RUN Nonprofit Girls Empowerment Program Girls on the Run	X		X	X
SNAP provides nutrition benefits to supplement the food budget of needy families so they can purchase healthy food and move towards self-sufficiency	0-18+	Supplemental Nutrition Assistance Program (USDA) Supplemental Nutrition Assistance Program (SNAP) USDA-FNS		X		X
Provides reimbursements for nutrition meals and snacks	1-18+	Child and Adult Care Food Program (CACFP) https://www.fns.usda.gov/cacfp		X		X

PARENT'S CONNECTIONS

The intent is to provide a variety of interventions that allow parents to pursue an intervention that best meets their individual needs and lifestyle.



Environmental Change Strategies

The intervention will provide accessible information through mass media and social media, with the parents as the target population. Will be used in this intervention the communication strategy to enforce knowledge and increase awareness about health issues. The campaign will provide nutritional information about junk food and healthy food making a comparison, ideas of indoor and outdoor games and exercises to increase daily physical activities, information about diseases caused by childhood diabetes, the rate and consequences.

**FIGHTING OBESITY
FOR HEALTHIER
FUTURES**

1 in 3 children are considered overweight or obese in the U.S. Children who have obesity are at greater risk of suffer from chronic diseases.



EAT HEALTHY
Avoid fatty and sugary food. Give to your children healthy eating opportunities



PHYSICAL ACTIVITIES
Promote regular outdoors physical activities and reduce screen time



BE AN EXAMPLE
Overweight parents tends to have obese children.



For more information access: fightingobesity.org.com

Behavior Modification Strategy

The behavior modification activity will start with posters and infographics displayed in places that are easily viewed by families, presenting information on why these modifications to their lifestyles are necessary and introducing the intervention. This intervention will focus on activities that provide a reward for making healthy food choices and activity choices based on logs kept. From this point, it will be important to maintain the behavior changes. Support groups will be organized as play groups, to encourage continuation of changed behaviors.



8. Budget

EXPENDITURES

POSITION TITLE	FT/PT	RESPONSIBILITIES	SALARY	BENEFITS	TOTAL
Community Outreach Coordinator	FT	In charge of programs and community coordination.	\$40,000.00	28%	\$51,200.00
Public Relations Specialist	FT	In charge of building a positive public image	\$25,000.00	28%	\$32,000.00
Program Director	FT	Implements the program and instructs the patients	\$25,000.00	28%	\$32,000.00
Public Health Educator	FT	Works directly with public to increase health awareness	\$22,000.00	28%	\$28,160.00
Nutritionist	PT	Instructs pt.'s about nutrition	\$13,000.00	0	\$13,000.00
Physical Education Specialist	FT	Instructs and prepares activities	\$21,000.00	28%	\$26,880.00
Marketing Specialist	PT	Conducts Marketing Research	\$13,000.00	0%	\$13,000.00
Graphic Design Specialist	PD	Prepares materials to be distributed to the public	\$1,500.00	0%	\$1,500.00
Cleaning Specialist	PT	Cleans the facility	\$10,000.00	0	\$10,000.00
					\$207,740.00

		INITIAL BUDGET FOR FIRST YEAR OF EXPANSION			
PRODUCTION ITEMS		PURPOSE OF EACH ITEM	COST		
Development & Training		For seminars and workshops @ various sites which	\$5,000.00		
		includes travel, lodging, and food.			
		Training and Marketing trips			
Office Supplies		Misc. supplies (pens, paper, files, ect.)	\$3,000.00		
		Contract with Staples for paper and Software			
Equipment		4 Computers with Monitors @ \$500.00 each	\$2,000.00		
		2 Laptops with full hardware @ \$700.00 each	\$1,400.00		
		1 full-size printers (B&W) @ \$200.00 each	\$200.00		
		1 color printers @ \$150.00 each	\$150.00		
		7 desks with chairs and mats	\$2,300.00		

		2 full-size file cabinets	\$150.00		
		3 long tables for conference room	\$300.00		
		8 multi-functional phones	\$560.00		
		20 padded/armed chairs	\$1,000.00		
		Furnishings/curtains, plants, pictures	\$1,000.00		
		TV, VCR-DVD player, Cart with cords	\$900.00		
		Cart for charts (2)	\$80.00		
		Fax machine	\$50.00		
		Large photocopy machine	\$600.00		
Printing		Pamphlets & promotional packets	\$1,050.00		
Memberships		Costco for food and supplies	\$100.00		
		Health organizations			
Facility		Rent @ \$1200.00/month	\$14,400.00		
		Utilities @ \$350.00/month	\$4,200.00		
		Phone @ \$200.00/month	\$2,400.00		

		Internet access with Cable @ \$50.00/month	\$600.00		
Insurance		Insurance @ ~\$700.00/month	\$8,400.00		
Travel		Around Regions in United States	\$1,500.00		
Additional Expenses		Company Van (15 passenger)	\$15,000.00		
		Gas Card	\$2,000.00		
			\$68,340.00		
INDIVIDUAL DEPARTMENT		ITEM	COST		
Public Heath Educator		Works directly with public to increase health awareness			
		Dry-erase board with supplies	\$100.00		
		Screen	\$100.00		
Public Relations Specialist		In charge of building a positive public image			
		Overhead projector	\$150.00		
		Dry-erase board with supplies	\$100.00		
		Screen	\$100.00		

Nutritionist/Physical Education Specialist		Instructs pt.'s about nutrition and prepares meals/instructs and prepares activities			
		Overhead projector	\$150.00		
		Dry-erase board with supplies	\$100.00		
		Screen	\$100.00		
		Food	\$2,600.00		
		Food utensils and cups(plastic)	\$150.00		
		Trays and pitchers	\$150.00		
Physical Education Specialist		Instructs and prepares activities			
		Materials to promote activity	\$1,000.00		
Cleaning Supplies		All cleaning supplies for the building	\$600.00		
			\$5,200.00		
		TOTAL COST FOR ALL ITEMS	\$281,280.00		

REVENUE

Resource	Amount	About			
Preventive Health and Health Services Block Grant		The Preventive Health and Health Services (PHHS) Block Grant Program allows the 50 states, the District of Columbia, 2 American Indian tribes, 5 US territories, and 3 freely associated states to address their own unique public health needs and challenges with innovative and community-driven methods.	\$200,000.00		
Community Food Project		The Community Food Projects Competitive Grant Program (CFPCGP) has existed since 1996 as a program to fight food insecurity through developing community food projects that help promote the self-sufficiency of low-income communities. Community Food Projects are designed to increase food security in communities by bringing the whole food system together to assess strengths, establish linkages, and create systems that improve the self-reliance of community members over their food needs.	\$85,000.00		
Total cost of Expenditures			\$281,280.00		
Balance			\$3720.00		

9. Marketing Plan

Fighting obesity for a healthier future will be easier to obtain by the target population if it has good accessibility. Placement should be in areas frequented by families. Materials that are appealing to families with inviting colors and quality formatting, would draw the attention of the target population.

Some things that keep the target population from the desired behavior are the convenience of unhealthy foods (Jacobson et al., 2015, p. 01), their parent's influence and lifestyle, the distractions offered by television and video games (Tips to help children maintain a healthy weight, n.d.), and a sedentary lifestyle

The target population can enjoy the benefit of healthier children with well-being, self-esteem, success and longer life expectancy. In order to enjoy these benefits, they are willing to give up their bad habits, beliefs, personal preference, and perceptions. More specifically they are willing to give up unhealthy food, screen time, and their sedentary life-style.

Some programs that will help them within their different communities are National Collaborative on Childhood Obesity Research (NCCOR), Early Childcare and Education Obesity Prevention Program, Nemours Children's Health System (Nemours), Eat Smart. Play Hard, Fit WIC, Robert Wood Johnson Center to Prevent Childhood Obesity, Immediate Food Assistance, Food Stamps and Meals (SNAP Food Benefits), WIC Nutrition Program for Women, Infants, and Children, Free School Meals for Children, YMCA, Boys and Girls Club, Play 360, Girls on the Run, Five a Day Works ("Food assistance," 2020).

In order to support the community programs, our program will be available physically and online. It will be available at local schools, governmental offices, such as WIC, and as mentioned previously, non-profit organizations such as YMCA Monday through Friday. With an availability of 9:00 am to 5:00 pm at local offices, community centers. It will be available online at all hours.

The program will be offered both on an individual basis and in some cases, it will be offered to small groups. It will be tailored to meet the needs of the target population, and will be formulated to be accessible to low-income families. Other programs can be utilized virtually or in a chosen physical location.

The best way to communicate information about the product is through posters, pamphlets, mass media and online through the program website and social media. This will help parents who are looking for different alternatives to help their family members. We have found that in some instances, family members are willing to participate but in other cases the parents are willing to reinforce the changes even if their children are not

willing to do it, at least at the beginning. The parents are showing a willingness to start a healthier lifestyle.

The target population has been identified as:

- Children from 2 to 11 years old that eat at school daily and have few healthy options.
- Parents unaware of childhood obesity and the problems it can cause
- Parents that cannot take their kids to make periodic exams for lack of time or financial conditions
- Parents with poor access to information, nutrition and physical education professionals
- Parents that have an unhealthy lifestyle and transmit their way of living to their children on daily basis
- Parents with low income and little access to natural food
- Families living in areas with few healthy eating possibilities
- Families that do not have access to parks, playground or any other open space to practice exercises

The segments that we will focus on are:

- Parents who are unaware of childhood obesity and the problems it can cause and
- Parents with poor access to information, nutrition and physical education professionals

While we segment, we will use these measures to help guide our decisions.

1. Measurable: Is possible to measure the number of children with obesity
2. Substantial: The segment of parents ill-informed and unaware is large. The program will be delivered to the USA country and half the program will be targeted through online sources.
3. Accessible: The program will be available at local schools, governmental offices, such as WIC, and non-profit organizations such as YMCA, then people will have physical access to it. But it will also be available through online sources and social media, and launched through mass media as television to have a large range while spreading information. The segment is located around the country but the program will be delivered everywhere.
4. Differentiable: The segments are co-dependent but will not receive the message the same way, the marketing strategy will be different. The first segment is unaware of the obesity problem and will be realizing the problem inside their homes through the informative marketing approach. The second segment knows the problem but do not have access to professionals or do not know how to help their kids.

5. Actionable: The intervention was planned to reach the parents as the target population to help the kids change their healthy condition. Because of the segment age targeting parents has shown to be more effective.

Detailed Marketing Plan

We have chosen two segments to target with our program, both parents unaware of the obesity problem and parents aware of their kids' obesity but without appropriate information and professional support. The two segments appropriately fit the planned interventions and are measurable, substantial, accessible, differentiable, and actionable. Both interventions are measurable, because it is possible to measure the number of children with obesity, and are substantial because the number of parents ill-informed and unaware is large. The program will be available at local schools, governmental offices, such as WIC, and non-profit organizations such as YMCA, to increase the accessibility.

This program will be supplemented through online sources and social media, and launched through mass media to increase the spread of information. The segments are co-dependent but will not receive the message the same way, the marketing strategy will be different. The first segment is unaware of the obesity problem and will be realizing the problem inside their homes through the informative marketing approach. The second segment knows the problem but do not have access to professionals or do not know how to help their kids. The intervention was planned to reach the parents as the target population to help the kids change their health conditions. Because of the segment age, targeting parents has shown to be more effective and the chosen segment proves to be appropriate.

Fighting Obesity for Healthier Futures is divided in three sections, and will be addressing parents unaware of childhood obesity and the problems that can be caused by poor access to information, nutrition and physical education professionals. The program encourages healthy lifestyle choices for families and will provide information on the behavior and short/long term health outcomes. The intent is to provide a variety of possibilities to allow parents pursue what best fits their reality. Parents have a large age range, but usually access media and drive around the town.

This program will be available and promoted through digital communication on social media, advertising posters placed in highly visible areas and recommendations from public relations. Also, the communication will exist through pamphlets, posters, infographics and other types of media material, it will be free and easily accessible in community centers, local offices, schools and online.

Marketing Examples:

TIPS TO MAINTAIN YOUR CHILDREN HEALTHY EATING

1

Provide fruits and vegetables to contribute to a healthy and balanced diet.

2

Make healthy snacking attractive and easily accessible. Cut in funny shapes and make different fruits combinations.

3

Let children interact with the food. Create artist stamp pictures, make a sensory game with food.

4

Cook and eat together. Do a creative eating session with your family and challenge children to cook.

5

Learn and teach about food. Grow fruits and vegetables.



FOR MORE INFORMATION ACCESS: FIGHTINGOBESITY.ORG.COM OR CDC.GOV

FIGHTING OBESITY FOR HEALTHIER FUTURES

1 in 3 children are considered overweight or obese in the U.S. Children who have obesity are at greater risk of suffer from chronic diseases.



EAT HEALTHY

Avoid fatty and sugary food. Give to your children healthy eating opportunities



PHYSICAL ACTIVITIES

Promote regular outdoors physical activities and reduce screen time

BE AN EXAMPLE

Overweight parents tends to have obese children.



For more information access: fightingobesity.org.com

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