

Needs Assessment

Case Study 7: Childhood Obesity and Immigration

HPRB 3700

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Sofia is a six year old whose Latino parents speak Spanish at home. Sofia is significantly overweight (as measured by BMI in her PE class) and her teachers are worried about her future health. Sofia's class goes to PE twice a week for 40 minutes, but she does not really enjoy PE. Sofia prefers sitting and talking to other girls during recess, rather than running or playing, and she chooses to eat only fried foods at lunch time. Sofia's snack from home is always something sweet. What help is available without making her stand out in any way from her peers?

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Health Section

Childhood Obesity

Obesity is a significant health challenge across the United States, affecting more than 100 million individuals across all ages and demographics (CDC, 2024). It is a condition characterized by excessive fat accumulation that can negatively affect health and is commonly determined by calculating body mass index (BMI) (CDC, 2024). In both adults and children, BMI is a screening tool rather than a direct measurement of body fat, but a high BMI can indicate the possibility of excess fat tissue and prompts further clinical evaluation of patients (Cleveland Clinic, 2023).

Childhood obesity occurs when children carry excess body fat at an early age, leading to other health issues (CDC, 2024). Children need a certain amount of calories for proper growth and development, but when they consume more calories than they use, their bodies may store the surplus as fat (Cleveland Clinic, 2023). For children, obesity is defined as having a BMI at or above the 95th percentile for their age and sex (CDC, 2024). Carrying this extra weight puts children at a high risk of developing other chronic conditions like hypertension, diabetes, insulin resistance, high cholesterol, and non-alcoholic fatty liver disease (Cleveland Clinic, 2023).

Beyond physical health, childhood obesity can also contribute to mental health issues and social challenges for individuals. Children who are obese are more likely to experience bullying, social isolation, low self-esteem, and depression, which often emerge before more serious medical conditions develop (Cleveland Clinic, 2023).

Childhood obesity is a particularly concerning issue because its effects can last well into adulthood and because it increases the risk of chronic health conditions and long-term health

complications for an individual (Mayo Clinic, 2023). Beyond leading individuals toward poorer health outcomes, experiencing obesity and its effects in childhood can also lead to an overall decreased quality of life and shorter lifespan (WHO, 2025).

Childhood obesity is a multifactorial condition, influenced by a combination of social, behavioral, and biological determinants of health (Cleveland Clinic, 2023). One of the primary causes of the issue is dietary habits. Frequent consumption of foods and beverages high in sugar, fat, and sodium can contribute significantly to unhealthy weight gain (Cleveland Clinic, 2023). This includes consuming ultra processed foods, candy, fast foods, and sugary drinks. Eating large portion sizes and eating out frequently also contributes to this risk.

Physical inactivity also plays a major role in childhood obesity, especially when children spend excessive time doing sedentary activities like watching television, using social media, or playing video games. A lack of movement such as through screen time not only reduces calorie expenditure, but also increases a child's exposure to advertising for unhealthy foods (Cleveland Clinic, 2023). Poor sleep habits and exposure to secondhand smoke are additional behavioral risk factors linked to obesity (Cleveland Clinic, 2023).

Family and home environment are also contributors to childhood obesity. Children often model the eating and activity behaviors of family members. A lack of structured mealtimes, reliance on convenience or fast foods, and limited opportunities for active play can all contribute to unhealthy weight gain (Cleveland Clinic, 2023).

Psychosocial influences can further worsen these risks. Adverse childhood experiences, chronic stress, and certain medications can elevate obesity risk. For example, prolonged stress can raise cortisol levels, which increases the likelihood of overeating or cravings for unhealthy

foods. In addition, certain medications including some antidepressants, antipsychotics, steroids, and mood stabilizers, are linked to weight gain in some children (Mayo Clinic, 2023). While many of these influences are modifiable and within a family's control, others are less so.

Biological factors also play a role in childhood obesity. Genetics and family history can predispose children to gaining weight or having a BMI that is considered in the obesity range. Individual hormonal imbalances could also be a factor for childhood obesity, including thyroid or insulin issues that may slow metabolism or increase appetite leading to weight gain (Cleveland Clinic, 2023).

Social and economic statuses also influence a child's risk for obesity. Families with limited financial resources may face barriers to accessing nutritious foods and safe spaces for physical activity and movement (Cleveland Clinic, 2023). In such an environment, reliance on inexpensive, processed foods combined with fewer opportunities for regular exercise further increases the likelihood of obesity.

Childhood obesity is typically diagnosed using body mass index (BMI) which is a calculation to determine whether a child's weight falls within a healthy range for their age and sex (CDC, 2024). For children, BMI percentiles are used instead of absolute numbers, and being at or above the 95th percentile is considered obesity (CDC, 2024). Healthcare providers also use growth charts and consider other factors such as eating habits, family history, physical activity levels, and any underlying medical conditions to assess the weight of children (Sahoo et al., 2015). In addition to BMI, certain tests like bloodwork can be ordered to assess for obesity-related complications. Blood tests can check blood glucose, cholesterol levels, and liver function which all give information about the health status of the patient. Blood pressure

readings are also helpful in screening for hypertension and sleep assessments are helpful if conditions like sleep apnea are suspected (Mayo Clinic, 2023). Accurate diagnosis of childhood obesity allows healthcare providers to identify the issue early and implement prevention or treatment strategies before long-term complications develop (Mayo Clinic, 2023).

Approximately 14.7 million children and adolescents (aged 2-19) in the United States are obese, which is equivalent to 1 in 5 individuals in that population (CDC, 2024). Prevalence rates differ among racial and ethnic groups, with rates that are highest in Hispanic children at 26.2%, and non-Hispanic Black children at 24.8%, followed by non-Hispanic white at 16.6%, and non-Hispanic Asian children at 9.0% (CDC, 2024). Being overweight or obese is also more common in children who live in poverty, live in communities with limited resources, have families that have immigrated to the U.S., or experience discrimination or stigma (Cleveland Clinic, 2023). These disparities demonstrate that there are complex environmental, social, and cultural factors at play that contribute to obesity risk in children in the United States.

Effect on Mental and Physical Health

Childhood obesity is one of the most serious public health challenges in the 21st century due to its adverse consequences for health outcomes. Since 1975, childhood obesity rates have tripled worldwide (Kokka et al., 2023). An estimated seventy million children will be diagnosed as obese or overweight by 2025 across the world (Rankin et al., 2017). As childhood obesity rates continue to increase, it is essential to examine the effect obesity has on children's physical and mental health.

Childhood obesity tends to have an inverse relationship with mental health: as one's weight increases, their mental health decreases (Rankin et al., 2017). This effect can be attributed

to various reasons. For one, the stigma of obesity and bullying causes many children develop suicidal thoughts (Rankin et al., 2017). Additionally, bullying causes children to engage in self-harming behaviors and increases the number of suicide attempts (Rankin et al., 2017). Children who are obese or overweight who were bullied were found to have lower self-esteem and higher depressive disorders (Rankin et al, 2017). For example, children who face weight-victimization have a 40-50% greater likelihood of feeling sad, depressed, and worse about themselves than children who do not face weight-victimization (Rupp et al., 2019). While bullying is one of the main reasons for poor mental health outcomes in children who are obese, it is also important to examine how experiencing this affects their bodies.

Mental health disorders such as depression and anxiety have adverse effects on the body (Kokka et al, 2023). For instance, depression and anxiety disrupt hormone levels which impact food intake and sleep levels. Anxiety and chronic stress elevates glucocorticoids which may lead to increased food intake, partially foods that are rich in fat and sugar (Kokka et al., 2023). Depression distorts energy, motivation, and attitude towards eating, which can all increase weight gain (Kokka et al., 2023). While it is important to examine how childhood obesity affects mental health, it is equally as important to focus on how childhood obesity impacts physical health.

Obesity is linked to a lower quality of physical and social indicators of quality of life (Kokka et al., 2023). Children who are obese are more likely to develop hyperglycemia, type II diabetes, high cholesterol, hypertension, and breathing conditions (Kokka et al., 2023). In regard to breathing conditions, asthma and the development of sleep apnea are more common in children that are overweight or obese (Mayo Clinic, 2025).

Social Impacts

Childhood obesity can have a significant impact on a child's social life, which often leads to poor experiences in school or with their peers. Children who are obese are at a higher risk of being bullied or teased by classmates, especially in school environments where appearance and physical ability are often emphasized (Harrist et al., 2020). Bullying can be verbal, such as name-calling and making jokes, or social, such as excluding someone from games or group activities. These experiences can cause feelings of rejection, loneliness, and isolation (Harrist et al., 2020). The negative emotions that result from these interactions often lead to lowered self-esteem, poorer mental health, and in many cases, decreased academic performance (Han et al., 2025). Children who are overweight may dread going to school, fear social settings, or avoid situations where their body might be judged, such as gym class or sports. Over time, this avoidance can reduce their participation in physical activities, further contributing to weight gain. The stress that comes with bullying or being excluded can become overwhelming and may cause anxiety or depression (Han et al., 2025). Some children cope by turning to food for comfort, which can create an unhealthy cycle of emotional eating (Waasdorp, 2018). Research also shows that weight-based teasing about weight can make children feel socially disconnected and less likely to engage with peers, which intensifies their emotional struggles and reinforces sedentary habits (Puhl et al., 2017). These social and psychological consequences show how obesity affects much more than physical health. It can shape a child's confidence, relationships, and overall well-being throughout life.

Treatments

Possible treatments for childhood obesity generally focus on lifestyle and behavioral changes, though medical and even surgical interventions may be necessary in severe cases (Mayo Clinic, 2025). Lifestyle modifications include promoting balanced nutrition with adequate vegetables, fruits, whole grains, and lean proteins while limiting foods and beverages with added sugar (Mayo Clinic, 2025). Encouraging portion control and mindful eating are also helpful strategies. Regular physical activity for children is crucial, with a goal of at least 60 minutes of moderate to intense activity per day through enjoyable activities such as sports, playing on the playground, or family walks (CDC, 2024). Limiting screen time and encouraging movement are also helpful. Behavioral and family based-interventions that involve positive reinforcement, goal-setting, self-monitoring, and support for stress management, emotional eating, and sleep hygiene have also been shown to be effective in treating childhood obesity (Cleveland Clinic, 2023).

In some cases, medications may be considered and prescribed under medical supervision for children with severe obesity or related complications. Medicines such as phentermine and semaglutide may help with weight loss, especially if diet and exercise alone are not enough (Mayo Clinic, 2025). For individuals 13 and older with extreme obesity who have not responded to other treatments and have significant comorbidities, bariatric surgery may be an option, but this is always carefully considered and accompanied by long-term follow up (Cleveland Clinic, 2023).

Culture Section

Family Dynamics and Roles

Parents have a large influence on children's diets and physical activity, which directly impacts their risk of developing childhood obesity (Tomayko et al., 2021). Having family meals is a common tradition in many Latino households, so parents or caregivers often control the types of foods being prepared and served in the home. Children's eating habits are strongly influenced by what they see their parents eat on a daily basis (Tomayko et al., 2021). Also, parents' behaviors around food, exercise, and screen time are learned and repeated by their children (Ochoa et al., 2018). Additionally, parents' beliefs about what a "healthy" body looks like and their attitudes toward weight and appearance can shape children's body image and how they perceive themselves. Together, these family dynamics play an important role in either decreasing or increasing the likelihood of obesity. Parents' influence also goes further than just food choices. It also includes how they structure the home environment and establish daily routines. Families who encourage outdoor play, limit screen time, and participate in shared activities tend to raise children who view exercise as normal and enjoyable, while homes with fewer boundaries often promote sedentary behaviors (Ochoa et al., 2018). Studies show that when parents model healthy behaviors, such as preparing nutritious meals and staying physically active, their children are more likely to adopt similar habits (Mahmood et al., 2021). Family meals in particular have been found to lower obesity rates, with regular shared meals having better dietary qualities (Jones et al., 2023). Positive family interactions in the household during mealtimes can also support healthier eating behaviors and overall well-being. The emotional climate of the household also matters. For example, positive family interactions during mealtimes and supportive communication foster healthier eating behaviors and greater psychological well-being (Utter et al., 2023). In contrast to that, households that have high stress environments or where parents are less strict about diet, screen time, or bedtime, tend to see

higher rates of childhood obesity (Maia et al., 2025). These findings emphasize that childhood obesity prevention begins at home, through consistent exposure of healthy eating habits, structure in the home, and emotional support from family.

Cultural Perceptions Regarding Body Image

Across the world, cultural norms and perceptions differ regarding body image. In the United States, one in five children are obese (East et al., 2019). The prevalence of childhood obesity differentiates between ethnicities, genetics, culture, and home environment and it is important to understand why. Social media also plays a prominent role in childhood obesity and body image (Cordero et al., 2023). As childhood obesity emerges as one of the major health challenges of the 21st century, it is imperative to examine how cultural perceptions affect childhood obesity rates in the United States.

While childhood obesity rates have been increasing as a whole, they have particularly been increasing in children in high-stress homes (East et al., 20219). For instance, children that live in a household with high maternal depression, an absent father, low parental warmth, are associated with a higher BMI or accelerated BMI growth (East et al., 2019). An absent father may cause their children to lack physically arousing activities, and hinders their motor development and physical activity (East et al., 2019). Hindering motor development skills and physical activity creates poor habits for children. For instance, the modeling of sedentary habits early in childhood leaves these children more likely to reinforce these sedentary habits later on (East et al., 2019). Sedentary habits learned early on are associated with children who have higher BMIs.

Another factor of differences in body image between groups can be based on acculturative stress. Acculturative stress is the psychological effect of adapting to a new culture (Cordero et al., 2023). Acculturative stress was found to be a predictor of body size (Cordero et al., 2023). For example, people of Hispanic or Latino backgrounds were found to have higher acculturative stress, which is a significant predictor of body size (Cordero et al., 2023). Emerging in a new culture where body image culture differs can raise stress levels.

School, Social, and Peer Dynamics

Children's health behaviors are formed early in life and set the stage for long-term well-being. Eating patterns, levels of physical activity, and perceptions of body image are not just personal choices but outcomes shaped by the environments in which children live, learn, and play (Lewallen, 2015). Schools are especially important because children spend a large portion of their day there, and schools often determine the foods children are exposed to, the amount of physical activity they receive, and the social norms they internalize (Lewallen, 2015). At the same time, peer relationships, family influences, socioeconomic status, and the rise of digital media create additional layers that can either promote or hinder healthy growth. Examining the intersection of these environments shows why multifaceted interventions are necessary to address childhood obesity and encourage healthier lifestyles (Klein, 2023).

One of the most visible ways schools influence health behavior is through food availability. School food environments, coupled with social competence, are closely tied to obesity risk among elementary school students (Miyazaki, 2015). A cafeteria filled with fruits, vegetables, and whole grains sends a powerful message about what eating should look like, while a cafeteria dominated by fried foods, pizza, and sugary beverages normalizes unhealthy eating.

Policies like the Healthy, Hunger-Free Kids Act of 2010 sought to standardize nutrition in U.S. schools by requiring more fruits and vegetables, lower sodium, and whole-grain options, reflecting the recognition that structural changes in the cafeteria can shift behavior (Klein, 2023). Beyond food, school schedules matter too. Time allotted for recess and physical education (PE) provides essential opportunities for activity; cutting these for academic instruction can unintentionally promote sedentary habits (Lewallen, 2015). Comprehensive approaches that target both nutrition and physical activity are essential for meaningful change.

Recent systematic reviews show that one-dimensional programs rarely work. Klein et al. (2023) found that multifaceted, sustained school-based interventions, such as healthier cafeteria standards combined with nutrition education and expanded PE, are most effective in reducing pediatric obesity. For example, programs that teach students about portion sizes while simultaneously removing vending machines stocked with sugary snacks tackle both knowledge and environment. Similarly, adding after-school sports or activity clubs expands opportunities for movement, especially for students who may not have safe play areas at home (Klein, 2023). These findings highlight the importance of embedding health into the very structure of schools, not as one-time campaigns but as continuous, long-term policies supported by administrators, teachers, and staff.

Beyond formal policies, peer dynamics strongly shape how children think and act about health. Jackson and Cunningham (2015) stressed that children often mirror the behaviors of friends and classmates, whether that means joining a soccer team or frequenting fast-food restaurants. Positive peer modeling can encourage exercise and healthy eating, but negative peer pressure can normalize soda consumption, junk food snacking, or skipping PE. Social challenges also complicate this picture. Bullying and weight stigma can make children self-conscious,

leading to unhealthy coping behaviors such as skipping meals or emotional eating. Body image pressures, often magnified during adolescence, may also push some students toward extreme dieting or unhealthy exercise patterns. These dynamics suggest that school health programs should not only improve access to healthy food and activity but also address the emotional climate, creating a supportive environment where students feel safe to make healthy choices.

Individual choices cannot be separated from structural realities. Miyazaki and Stack (2015), using a multilevel growth model, showed that school-level characteristics like socioeconomic composition and resource availability significantly predict obesity outcomes. A school in a low-income neighborhood may struggle with underfunded cafeterias, limited PE facilities, or fewer extracurricular options, placing students at a disadvantage compared to peers in wealthier areas. This highlights the broader equity issue: health promotion is not just about teaching better habits but also about ensuring that schools have the resources to support those habits. For example, wealthier districts may be able to offer farm-to-school programs, fresh produce deliveries, or state-of-the-art gyms, while lower-income districts may rely on packaged, processed foods and outdated equipment. Addressing these inequalities requires policy action, funding, and cross-sector collaboration to ensure that health promotion is accessible to all children, regardless of zip code.

Schools do not operate in isolation; they interact with family and community contexts. Even the best school meal programs can be undermined if children go home to food deserts where healthy groceries are scarce or if parents work long hours and cannot supervise meals. Klein et al. (2023) note that interventions work best when schools actively partner with families and communities. Programs that include parental workshops on nutrition, community gardens, or after-school cooking classes can help extend school messages into the home. Community

partnerships also create opportunities for children to stay active outside school hours, such as through YMCA programs, sports leagues, or safe playground initiatives. These efforts create consistency across children's environments, making healthy behaviors part of their everyday routines rather than isolated actions tied only to school hours.

In today's world, technology and media exposure are inseparable from children's health behaviors. On the negative side, screen time often replaces physical activity, while advertising for high-calorie snacks and fast food is pervasive on social media platforms (Lewallen, 2015). Exposure to unrealistic body images online can worsen body dissatisfaction, leading to unhealthy dieting or disordered eating. At the same time, technology can be part of the solution. Schools that integrate digital platforms for health education, such as apps that track physical activity, gamified fitness programs, or interactive nutrition modules, can engage students in more personalized and motivating ways (Lewallen, 2015). For example, step-count challenges or online wellness clubs can make health promotion fun and peer-driven. Recognizing the dual role of technology as both a risk factor and a potential tool highlights the need for balanced approaches that teach media literacy alongside promoting digital resources that support well-being.

Taken together, these findings show that no single factor determines children's health behaviors. Instead, behaviors are shaped by an ecological web of influences that include school structures, peer groups, family environments, socioeconomic contexts, and digital media (Miyazaki, 2015). Each layer can either reinforce or undermine the others. For example, a child may learn about healthy eating at school, but if peers encourage fast-food outings and home environments lack nutritious options, the school's efforts may have limited impact. This is why public health frameworks, such as the Social Ecological Model, stress the need to address

multiple layers simultaneously. Comprehensive strategies that connect policy, education, family engagement, and media awareness are far more likely to achieve sustainable changes in behavior than isolated efforts.

Schools are uniquely positioned as central hubs where children's health behaviors can be shaped in lasting ways. However, the evidence shows that improving health outcomes requires more than changing cafeteria menus or adding a few minutes of PE. It requires sustained, multi-layered efforts that address school policies, peer norms, family engagement, socioeconomic disparities, and the growing influence of digital media. Interventions that integrate these levels through nutrition standards, anti-bullying initiatives, community partnerships, and digital health programs offer the best chance of reducing childhood obesity and promoting lifelong wellness. By recognizing the interconnected nature of children's environments, policymakers, educators, and communities can work together to ensure that the healthy choice becomes the easy, accessible choice for all children.

Food and Culture Practice

Food and cultural practice play a significant role in shaping childhood obesity among Latino families. Traditional latino diets often include calorie dense meals that are rich in fried foods, refined carbohydrates, and sugary snacks. Cultural values surrounding mealtime may also back up these habits as well due to family members providing these filling and abundant meals as a way to showcase their love, care, and good parenting. Also, these eating habits are influenced by social modeling as children are more likely to adopt the food preferences of parents and older family members who may not encompass the most healthy lifestyles as well. When caregivers constantly prepare high calorie meals the children may think of these foods as

the everyday norm to eat and may lead to them only desiring these types of food which increases their risk for obesity (Lindsay et al., 2016). The challenge lies in balancing cultural food traditions with healthier modifications so that children can benefit from shared family meals without being placed at greater risk for poor health outcomes.

At the same time acculturations which is the process by which immigrant families adopt aspects of American culture can further cause complications and confusion within food practices. Research shows that latino families who have lived in the United States longer often shift away from traditional diets and towards processed or fast foods, which are cheaper, heavily market, and widely available (Ayala et al., 2008). This dietary transition can worsen childhood obesity rates especially when combined with socioeconomic barriers that limit access to fresh produce and healthier options. However, traditional cultural foods also offer protective elements that could support healthy outcomes if focused on more within diets. Certain foods like beans, corn, vegetables and fresh fruit are packed with nutrients and affordable when used in culturally familiar ways.. By adapting protective elements of traditional diets while also thinking about the risk of acculturation, communities can help families preserve cultural identity while promoting healthier eating practices that benefit children's long term well being.

Socioeconomic Status

Socioeconomic Status (SES) plays an impactful role in showcasing childhood obesity among immigrant families. Research shows that immigrant families are disproportionately represented in low income groups which directly impacts access to nutritious foods and safe spaces for physical activity (Ogden et al., 2014). Families with limited financial resources often rely on inexpensive, calorie dense foods like fast foods, fried items, and packaged snacks since

they are more affordable and accessible than fresh produce or lean protein sources. The family's purchasing choices may be forced not only by cultural norms but also by financial necessity as cheaper and less nutritious options lead the way in household meals. This pattern of choices represent how economic constraints reinforce the loop many kids fall in when it comes to childhood obesity, particularly within immigrant families as they have to move through both financial stress and cultural adaptation.

Looking beyond food access, SES also influences opportunities for physical activity and overall lifestyle. Families living in low income neighborhoods or other SES classes are more likely to reside in areas without safe parks, recreational facilities, and sidewalks which puts limitations on children's ability to be involved in playing outside of the school setting (Whitt-Glover et al., 2009). When children avoid physical activity during recess or PE, it may not only reflect personal preferences but also a lack of opportunities to practice these health habits within their community environment. Also, parents working multiple jobs or long hours may have less time to prepare nutritious meals or play with their kids (to increase physical activity) further contributing to the issue. These socioeconomic barriers emphasize how obesity cannot be addressed through individual behavior change alone but also requires attention to broader structural interventions. By addressing the link between poverty, environment, and health behaviors, public health professionals can better design culturally sensitive interventions that support low income latino families ion accessing healthier lifestyle factors and foods for not only their children but themselves as well.

Bridge

Case study seven is focused on finding resources for a Latina child who has recently immigrated to the United States and is struggling with obesity. In our case study, Sofia is a six year old girl who has moved to Athens, Georgia with her Latino parents who speak Spanish at home. Sofia is significantly overweight, as measured by her BMI in her PE class, and her teachers are worried about her future health. She goes to PE twice a week for 40 minutes but does not really enjoy the class, she prefers sitting and talking to other girls during recess over running and playing, and she chooses to eat only fried foods at lunch time. At home, Sofia always chooses snacks that are sweet.

Sofia's situation is not uncommon among Hispanic children. As of 2024, Hispanic children have the highest rates of obesity in the United States (CDC, 2024). Sofia needs to be taught about the importance of healthy eating and physical activity in an encouraging, non-shameful way. Her familial support will be crucial to her positive outcomes as well as her support from her teachers and school. Her challenges with obesity are shaped not only by lifestyle but also cultural, socioeconomic, and familial factors, all of which must be carefully assessed and considered. This situation also may require support from medical professionals. Resources needed in this case include medical care, support, better education, and access. It is crucial that interventions support Sofia without making her feel singled out, and that immediate action is taken to prevent further health complications.

Medical Care

Medical Intervention

Sofia will need to consult with a medical provider to learn about obesity and to treat her condition, preventing it from getting any worse. Beyond having a professional check her BMI by measuring her current height and weight in office, her vital signs should be taken and her bloodwork may need to be drawn. For example, her blood pressure should be taken to check for hypertension or pre-hypertension and her labs should be checked for conditions like high cholesterol, type 2 diabetes, and thyroid issues (Mayo Clinic, 2025). The medical provider should also take a comprehensive history, asking Sofia and her parents about diet, activity, medications, and family medical history, and should discuss lifestyle changes with the family (Mayo Clinic, 2025). Sofia also may be symptomatic or asymptomatic for obesity. Being symptomatic for obesity can include experiencing difficulty breathing, excessive sweating, fatigue, and joint pain (Children's Hospital Colorado, n.d.). If Sofia has reached the symptomatic stage, she most likely will need further medical intervention. This might include referral to a pediatric nutritionist, behavioral therapist, or endocrinologist depending on the findings (Children's Hospital Colorado, n.d.).

Culturally Competent Pediatric Guidance

Culturally competent pediatric guidance would greatly benefit Sofia and her family, as it allows them to fully understand Sofia's health condition and the steps she would need to take to take care of her health and support her well-being. This guidance would ultimately focus on medical assessment, early intervention, and family-based lifestyle changes tailored to her needs (Mayo Clinic, 2025). It is essential that when Sofia and her parents seek medical care, they are able to communicate effectively with their provider, ideally one who speaks Spanish or has access to a qualified translator. This ensures clear understanding and promotes trust between the family and the healthcare team. The provider should also recognize that Sofia's parents recently

immigrated to the United States and only speak Spanish, and take these factors into account when offering recommendations. In addition, lab work to screen for pre-diabetes, high cholesterol, and other health issues would also be important, as well as access to a detailed family and dietary history to help identify behavioral and environmental contributors to Sofia's health (CDC, 2024).

Support

Family Support

Familial support plays a vital role in addressing Sofia's condition and improving her long-term health outcomes and emotional well-being. Because Sofia is only six years old, her parents have the primary influence over her diet, activity level, and daily routines. Helping her family adopt healthier habits together will create a supportive environment that encourages sustainable change without isolating Sofia or placing blame or shame on her. Research shows that family-based interventions are among the most effective strategies for treating childhood obesity, as they promote shared responsibility, increase motivation to become healthier, and reinforce consistency of healthy habits at home (CDC, 2024).

For Sofia's parents, culturally competent education about nutrition, exercise, and health is essential. Providing information in Spanish ensures that her family fully understands what makes up a healthy diet, appropriate portion sizes, and the importance of physical activity (CDC, 2025). Strategies recommended by the CDC include modeling healthy eating patterns, engaging in physical activity together as a family, establishing consistent sleep routines, limiting screen time, and participating in structured family healthy weight programs when appropriate (CDC, 2025). Whether this education be through Sofia's medical professional team, through community-based

initiatives, or through online resources, teaching Sofia's parents how to support her condition is crucial.

Some strategies Sofia's family can implement these suggestions include healthy meal planning, preparing balanced meals together, and gradually introducing healthier food options like fruits, vegetables, whole grains, and lean proteins while respecting cultural traditions and financial limitations (Childhood Obesity Prevention, n.d.). They can also gradually replace sugary snacks and drinks with healthier alternatives (Childhood Obesity Prevention, n.d.). Additionally, setting aside time daily for family walks, bike rides, or active play can encourage physical activity (APA, 2019). Sofia's family can also limit screen time and help her maintain a healthy sleep schedule to support healthy growth and activity levels (APA, 2019). By actively participating in these strategies, Sofia's family can provide support to her in building healthier habits.

School and Teachers

Teachers and schools are at the center of Sofia's daily environment, making them significant partners in supporting her health and wellness. In order to help Sofia without making her feel singled out, teachers must shift their focus on creating a classroom and school culture that promotes healthy behaviors for all students, not just those struggling with obesity. This starts with offering nutrition and physical education that is both inclusive and engaging. Teachers should work with school administrators, counselors, and cafeteria staff to design lessons and meal options that focuses on balance, variety, and cultural inclusivity. For example, incorporating lessons about healthy versions of foods from different cultures, including traditional Latino meals, allows Sofia to feel represented while learning healthier habits. Teachers can also make classroom activities more active by introducing movement based breaks or short stretching

sessions between subjects. Integrating physical activity throughout the day and not just during PE has been shown to improve focus, academic performance, and overall health outcomes among elementary students (Centers for Disease Control and Prevention [CDC], 2024).

Additionally, teachers must receive proper training on weight stereotypes and cultural sensitivity to ensure that discussions about health and nutrition are handled appropriately. Research shows that when children receive judgment from educators about their body size, they are less likely to participate in physical activities or engage in classroom discussions about health (Pont et al., 2017). Teachers should look into promoting self confidence, celebrate body diversity, and highlight effort and participation rather than appearance or athletic ability. Implementing non-competitive, engaging physical activities such as dance, yoga, or relay games can make PE more appealing to children like Sofia, who currently avoids participation. Schools in Athens can also adopt components of the CDC's Whole School, Whole Community, Whole Child (WSCC) model to coordinate nutrition education, health services, and staff wellness (CDC, 2024). By taking empathy, inclusion, and holistic education into account teachers can play a transformative role in helping Sofia develop a healthy relationship with food and movement, setting her on a path toward lifelong wellness.

Peer Bonding Activities

As the United States is a society built on thinness, children that are obese are more likely to develop low self esteem (HealthyChildren, 2021). As young as six, children may face negative stereotypes with excess weight and believe they are less likable (HealthyChildren, 2021). It is important for children who are obese to overcome the social stigma of obesity, and the implementation of peer bonding activities can help this difficulty. It is statistically shown that

having peer influence around children that are obese promotes greater physical activity than without peer influence (Salvy, 2020). Peer bonding activities are essential for the wellbeing of Sofia, as they promote body confidence, while also promoting activity.

The first peer bonding activity is dancing. Dancing is an aerobic activity that promotes cardiovascular health while also being engaging and fun (Bijou Build, 2025). Dancing provides benefits for participants such as illuminating the ego and providing relief from tension, anxiety, and aggression (Tao et al, 2022). Implementing dance programs into school systems produces mental and physical health benefits (Tao et al, 2022). Sofia could join a dance club at her school which would promote bonding with other classmates, which could help increase her confidence and social skills. Additionally, dancing is a great way to express yourself which gives Sofia an outlet to have fun while still exercising. Ensuring that the dance club is non-competitive and is purely fun, could help inspire Sofia into taking up dancing as a hobby. Another benefit of dancing is that it is free, where Sofia can still dance outside of the club. Sofia could dance with others outside of school, with her family and friends, or even with herself. Sofia can create long-lasting friendships with her dancemates and develop the love for dance.

Another peer bonding activity that increases physical activity while also increasing social wellbeing is walking. Walking is the simplest form of aerobic endurance exercises (Wnuk et al., 2018). Walking helps maintain a healthy body weight, improves the immune system, and improves cardiac stability (Wnuk et al., 2018). Sofia could join a walking club at her school or go on walks with her friends around her neighborhood. Walking is an easy way to burn calories and promote good cardiovascular health. Additionally, by walking with her peers she may feel motivated to walk farther than she typically would by herself. Walking allows Sofia to have fun with her friends while she is still exercising. Another benefit of walking is that it is free, and is

not as physically or mentally demanding as other exercises. Since it is free, it allows Sofia to have the freedom to go on walks when she pleases.

Dancing and walking are both great ways for Sofia to become more confident exercising, while also having a support system readily available. Having the opportunity to exercise with others in an uncompetitive manner will help boost Sofia's self esteem and perception of her body image. Furthermore, developing dancing and walking into Sofia's lifestyle can foster healthy habits and positive perceptions of exercising.

Better Education

Inclusive Nutrition Education

Support from school and better education on the issue is another critical component in addressing Sofia's situation. Schools are an important environment for preventing and combatting childhood obesity because they reach the vast majority of school-aged youth (CDC, 2024). A comprehensive approach is needed when it comes to these programs in order to help students learn to live healthier lives in all aspects, specifically focusing on nutrition and physical activity in schools (CDC, 2024). Using such an approach supports the well-being and health of all students and does not single any students out according to their body size or weight. Being overweight or obese is a sensitive issue for students and families that must be addressed with understanding, compassion, and care.

Inclusive nutrition education involves a holistic approach to food, moving beyond calorie counting or diet rules (CDC, 2024). It should teach children to appreciate the variety and benefits of different foods while connecting nutrition to energy, learning, and growth. According to the

CDC, students typically receive less than eight hours of nutrition education per school year, though 40 to 50 hours are recommended to effectively change eating behaviors (CDC, 2024). Sofia's school should integrate more lessons on nutrition into the curriculum, either through a weekly lesson in health class or integrating lessons into different subjects and activities. For example, science class could incorporate food and health topics into lessons about the body or reading activities could be focused on stories about healthy meals and cooking.

In addition, nutrition education should be culturally relevant and available in different languages like Spanish to ensure that students like Sofia can connect what they learn at school to what they experience at home. Lessons could include encouraging students to share favorite family recipes while discussing healthier ingredient substitutions, or discussing how different cultures celebrate food and family through traditional meals (CDC, 2024). This kind of approach validates students' cultural backgrounds while promoting respect for diverse eating habits. For Sofia, incorporating foods that are familiar to her family into lessons about balanced meals can make healthy eating feel more accessible and attainable. Teachers could, for example, discuss how traditional meals in different cultures can be prepared in healthier ways, such as adding more vegetables and color to a dish or baking instead of frying. The school cafeteria can also support this effort by displaying posters about healthy choices and balanced meals.

Fun Physical Education

Physical education should also be made more inclusive and enjoyable at Sofia's school. For some students, physical education class can be rather intimidating and feel over-competitive, which may discourage participation. Since Sofia currently dislikes PE and prefers socializing with friends over physical activity, introducing engaging games and activities that combine fun

and social interaction could help her develop a more positive relationship with movement. For example, having classes with activities like dance, obstacle courses, or team-building games rather than making students run the pacer-test or do push ups, could be more engaging and fun. Programs and curriculums that emphasize movement for fun and stress relief, rather than weight loss or performance, are more likely to build long-term healthy habits (Teixera et al., 2012). According to the CDC, students should engage in moderate-to-vigorous activity for at least 50% of PE class time (CDC, 2025). To follow this guideline, PE teachers should use a curriculum that emphasizes student engagement and participation and work with their students to find enjoyable activities. Teachers can also provide individualized encouragement and support, celebrate effort over achievement, and create a positive and inclusive environment that allows students of all athletic abilities and skillsets to participate without feeling singled out (CDC, 2025).

Another thing Sofia's school could do is adopt the CDC's recommended "Comprehensive School Physical Activity Program" framework which incorporates multiple movement opportunities before, during, and after school including classroom activity breaks, recess, intramural clubs, and family/community engagement (CDC, 2025). This approach ensures that physical activity is not limited to PE class alone and helps create more opportunities for students to get active.

In addition, Sofia's school can collaborate with community organizations to offer after-school activity clubs, weekend sports programs, or family fitness nights. Involving parents and families reinforce healthy habits at home and turn physical activity into a shared, enjoyable experience. By prioritizing fun, social engagement and choice while providing multiple movement options and family support, Sofia's school can help their students develop sustainable habits that better their physical and emotional health.

Access

Bilingual Resources

Bilingual resources would make Sofia's care more effective for her family and provide them with the guidance necessary to make healthy choices for her. Health concepts such as BMI, portion sizes, and the importance of making healthy decisions can be easily misunderstood when heard in one's second language. Providing Spanish resources and materials, such as videos, pamphlets, etc., can ensure that information does not get lost in translation and is easily accessible for those whose first language is not English. This is especially important for Sofia's case; CDC data continues to show a higher prevalence of childhood obesity among Hispanic children, showing the need for bilingual promotion (CDC, 2024). Classroom and clinic conversations also work better when teachers and nurses use the family's preferred language while conversing. Schools that pair bilingual materials with qualified interpretation at meetings reduce misunderstandings and invite parents into real partnership. Evidence shows professional interpreter use improves care quality and outcomes for people with limited English proficiency, an approach schools can mirror when discussing sensitive topics like weight, diet, and physical activity (CDC, 2024).

Healthier choices should also be more accessible for Sofia and her family to understand. Bilingual nutrition education should celebrate cultural foods while nudging healthier choices. Cafeterias and classrooms can feature familiar Latino dishes prepared with healthier methods (baked instead of fried), alongside Spanish-language recipes and shopping guides. Culturally tailored nutrition programming has been shown to improve knowledge and dietary behaviors,

which is especially relevant given that Hispanic children currently have the highest obesity prevalence nationally (CDC, 2024).

Beyond the classroom, schools and community partners can make healthy habits easier for Sofia’s family to adopt by incorporating bilingual support into everyday routines. A simple, consistent school–home communication plan in Spanish (texts or emails about weekly menus, “taste-test” days, free after-school activity clubs, and weekend park events) keeps parents informed and engaged. Pairing this with referrals to Spanish-language offerings from local programs lowers cost and access barriers while reinforcing the same messages children hear at school. Finally, creating welcoming, non-stigmatizing spaces, like family cooking nights with culturally familiar recipes prepared in healthier ways, or events featuring dance and games, invites whole-family participation and helps new habits stick at home.

Healthier Food Options

For Sofia, gaining access to healthier foods is essential. Healthy foods help prevent children from the development of chronic diseases, improve mental health, and maintain a healthy weight (Nationwide Children’s, 2021). One effective way for children to gain access to healthier food is through school lunch programs. Since most U.S. children spend seven hours a day at school, and consume half of their overall calories at school, it is important to provide healthier food at school (Wethington et al., 2022).

Joining school lunch programs can provide Sofia with healthier options she may not have at home. Research shows that free lunch at school reduces food insecurity, obesity rates, and poor health (Food Research & Action Center, 2025). School lunches have a positive effect on children, especially those from low-income households, since they provide nutritious and

well-balanced meals (Food Research & Action Center, 2025). For Sofia, experiencing healthy, tasty meals may motivate her to make nutritious eating choices in the future. Additionally, if Sofia is eating the kinds of food that lead her to feeling insecure, it may be better to eat school lunch since her classmates will eat the same food.

Another benefit of school lunches is that it may save Sofia time and stress from having to pack a home lunch. Sofia may not always have time or the motivation to pack a school lunch which could lead her with a nutritiously lacking meal. Additionally, if she lacks motivation to pack her own lunch she may pack packaged, processed items such as chips or cookies because she does not have to make any of her own food. Eating school lunch saves Sofia time and allows her to eat a nutritionally balanced meal rather than carbohydrate-dense snacks at lunch.

Another way Sofia can obtain access to healthier food options is through school run food drives. School pantries provide free food to children and their families and provide a variety of food options (Feeding America, 2025). These food options typically consist of fresh fruits and vegetables, grains, meat, and canned foods such as beans (Feeding America, 2025). School pantries aim to help families who cannot afford groceries, and are not limited to students who receive free lunch (Feeding America, 2025). Sofia would have access to her school pantry, where she has the option to pick what she wants to eat, which may not be the case at home. This allows Sofia to have the option to choose healthier foods. Furthermore, the school pantry would most likely have a greater variety of foods to choose from, which could inspire Sofia to branch out and try new foods. Additionally, Sofia's parents may not be able to afford more nutritious food options, so access to food pantries may relieve some financial burden placed on them.

Affordable Access to Healthy Foods

Access to healthy foods is one of the biggest predictors of health and wellbeing in children (Access to Foods That Support Healthy Dietary Patterns, n.d.). When families live in areas with limited grocery options or cannot afford nutritious foods, they are more likely to rely on foods that are inexpensive and typically calorie-dense, high in fat, sugar, and sodium. Over time, this lack of access contributes to higher rates of childhood obesity, diabetes, and other diet-related chronic conditions (CDC, 2024). Families with lower incomes or recent immigrant backgrounds often face additional barriers, such as lack of transportation, lack of nearby supermarkets, or language differences that can make it difficult to go to certain stores or utilize nutrition programs/information (Park et al., 2023). For many Latino families, traditional meals can be rich in nutrients, but economic stress and easy fast, processed American foods have shifted normal eating habits toward unhealthy habits (Formagini et al., 2024). Schools, communities, and public health agencies play a key role in closing this gap by making sure children are exposed to healthy foods in their daily environments and that parents are supported with proper education on nutrition and affordable options. Increasing access to healthy foods is not only a matter of individual decisions but it is important for parents to know where they can access and afford healthy foods to provide for their children.

Schools can play an important role in helping Sofia get better access to healthy foods. Participating in programs that send home fruits, vegetables, and other nutritious foods home on weekends or school breaks can be really beneficial to children and parents (USDA, 2024). These programs make sure Sofia has healthy foods to eat even when she is not in school. Schools can also help by sharing information with parents about local resources in the area such as food banks, farmers markets, and nutrition classes being offered. This can encourage and support them to keep more healthy foods available in the home instead of foods with poor nutrients.

Sending home bilingual newsletters, infographics, or cooking tips are helpful ways to share affordable and healthy food options to parents (CDC, 2024).

Another way schools can help is by starting school gardens or joining farm-to-school programs. Programs where they teach children where their food comes from lets them enjoy fresh fruits and vegetables while learning more about healthy choices. When students are involved in gardening or cooking in school, they are more likely to eat healthier foods and make better choices (Georgia Organics, 2024). This can help Sofia learn why healthy foods are important while also making it something fun and enjoyable for her. These programs give students and parents the tools they need to create better eating habits and show that healthy foods can be fun and affordable. By helping and supporting families inside and outside of school, these programs can make a big difference in helping lower childhood obesity rates and improving the health of communities.

Asset Mapping

University of Georgia Cooperative Extension in Athens-Clarke County

The University of Georgia Cooperative Extension in Athens-Clarke County is a vital community resource that can support teachers, schools, and families in improving nutrition education, food access, and healthy lifestyle habits for children like Sofia. The Extension's Family and Consumer Sciences (FACS) program focuses on health promotion through nutrition education, meal planning, and family wellness initiatives (University of Georgia Cooperative Extension, 2024). For educators, this agency provides professional development resources within school programs that integrate nutrition into the classroom environment, helping teachers build engaging lessons that promote balanced eating without singling out specific students. For

example, Extension agents can visit schools to provide interactive, age-appropriate workshops where students learn about portion sizes, the importance of fruits and vegetables, and how to make healthier versions of foods they already enjoy such as baked instead of fried dishes. This approach directly supports Sofia's needs by normalizing healthy eating among all students and helping teachers align their curriculum with public health goals in a culturally sensitive way.

The UGA SNAP-Ed (Supplemental Nutrition Assistance Program Education) initiative, offered through the Athens-Clarke County Extension, is used to serve low income households and schools with a high percentage of children who qualify for free or reduced lunch. This program teaches children and parents useful strategies for preparing affordable, nutritious meals while focusing on culturally familiar foods. For Sofia's school, SNAP-Ed could provide bilingual materials and recipes that connect to Latino food traditions like preparing beans, rice, and vegetables in healthier ways so that nutrition education at school complements what Sofia's family practices at home. The Extension also partners with local food resources such as the Athens Farmers Market and the Food Bank of Northeast Georgia, which offers community based nutrition programs and affordable access to fresh produce (Athens Farmers Market, 2024; Food Bank of Northeast Georgia, 2024). Together these programs create an ecosystem of support for schools seeking to promote healthy eating and physical activity among students.

The Athens-Clarke County Extension office is located at 275 Cleveland Road, Bogart, GA 30622, and can be contacted at (706) 613-3640 or online at extension.uga.edu/county-offices/clarke.html. Most programs, including SNAP-Ed, are free and available to families regardless of immigration status. To access these services, teachers or school administrators can submit an online request form or contact the office to coordinate classroom visits, cooking demonstrations, or parent workshops. Because Sofia's parents speak

Spanish, it is important that the Extension provides bilingual outreach and translated educational resources, this allows for inclusion of immigrant families in Athens. By working together with the Athens-Clarke County Extension, Sofia's teachers can incorporate evidence-based nutrition lessons, connect families to local food support programs, and create a classroom environment where healthy eating is normalized rather than stigmatized. This resource effectively bridges the gap between schools and the community, helping children like Sofia develop lifelong healthy habits through culturally relevant education and equitable access to nutritious food.

Farm 2 Neighborhood

Farm 2 Neighborhood is a nonprofit in Athens, Georgia that acquires local veggies from local farms and delivers healthy meals to people around town living in poverty (Alternative Energy SouthEast, 2025). Farm 2 Neighborhood aims to build a sustainable culture of healthy eating for generations to come in Athens (Farm2Neighborhood, 2025). Farm 2 Neighborhood allows anyone to receive food, no paperwork or documents necessary. Their food is a first come first serve basis, where they receive shipments of 15,000-30,000 pounds of food each week (Farm2Neighborhood, 2025).

Every Friday, Farm 2 Neighborhood has a weekly food distribution around Athens where anyone can receive food. Anyone and any family can come and each receive a free hot meal and a bag of produce. For Sofia and her family, this would be an exceptional way to receive food on Friday, and relieve some financial strain of having to buy meals for the whole family. Furthermore, the bag of produce can be used throughout the next week, promoting healthy and balanced eating in their household. Farm 2 Neighborhood has two locations in Athens for the

food distribution each Friday, which is helpful for Sofia's family since they have the opportunity to pick which location they prefer or is closer.

One of Farm 2 Neighborhood's largest focuses is on its HEALTHYouth program. The HEALTHYouth program teaches elementary and middle school aged youth on teaching them what health and nutrition is, meal planning and budgeting, and how to make healthy meals (Farm2Neighborhood, 2025). Additionally, the HEALTHYouth program enlightens participants on other programs in Athens such as Bread for Life, to help foster future success and inspire participants (Farm2Neighborhood, 2025). Sofia could participate in the HEALTHYouth program as it would teach her about nutrition and healthy eating habits. The HEALTHYouth Program would also teach Sofia the basics of cooking, focusing on healthy meals, which can help her build cooking skills and motivate her to pursue cooking as a hobby. Additionally, Sofia can understand what a well-balanced meal looks and tastes like.

Farm 2 Neighborhood provides wonderful programs that aim to reduce poverty and food insecurity in and around Athens, Georgia (Farm2Neighborhood, 2025). For Sofia and her family, Farm 2 Neighborhood could be extremely helpful at providing them healthier food options. Sofia and her family could attend the 1000 Meals Food Drive that is open several times each year, and each receive a free meal and bag of produce. Farm 2 neighborhood also provides weekly food distributions every Friday, where Sofia and her family could receive a free meal.

Wholesome Wave Georgia

Wholesome Wave Georgia is a statewide nonprofit organization that works to make healthy, locally grown foods more affordable and accessible for families across Georgia. It was founded on the belief that cost should never be a barrier to nutritious foods. The program

partners with farmers markets, grocery stores, and healthcare providers to connect low-income households with fresh, high-quality produce. One of its most successful initiatives is the “Fresh for Less” program, which allows families using SNAP benefits to double the amount they are purchasing when they are buying fruits and vegetables at stores that participate in the program (WWG, 2024). For example, when you spend \$10, you get \$10 for FREE to spend on healthy fruits and vegetables (WWG, 2024). This organization helps make nutritious foods more affordable and also encourages families to buy local produce that supports Georgia farmers and strengthens community food systems.

Wholesome Wave Georgia’s approach also emphasizes education, inclusivity, and empowerment. WWG works with diverse communities, including Latino and immigrant families, to ensure that culturally important foods, such as beans, corn, and fresh produce, are available and affordable. This helps families keep their traditional diet while improving the nutritional aspect of their meals. The program also collaborates with healthcare providers through produce prescription programs, where doctors and public health professionals can prescribe fruits and vegetables to patients at risk of chronic illnesses like obesity and diabetes (WWG, 2024). These prescriptions can be redeemed at local farmers markets, which promotes local food markets and access to nutritious foods at the same time.

Athens Land Trust

The Athens Land Trust (ALT) is a community resource that can support teachers, schools, and families in improving nutrition education, food access, and healthy lifestyle habits for children like Sofia. ALT’s Community Agriculture program operates Williams Farm, an urban farm and education hub near downtown, where staff provide agriculture and nutrition

learning opportunities and connect residents to fresh produce. These activities help schools weave hands-on, culturally inclusive lessons (healthier takes on familiar dishes, portion awareness, garden-to-cafeteria tastings) into the school day without singling out individual students (Athens Land Trust, 2025).

ALT also expands affordable access to healthy food through its West Broad Farmers Market (WBFM) program and partnerships that double SNAP/EBT dollars, making fruits and vegetables substantially more affordable for low-income families. Wholesome Wave Georgia's matching program at ALT's market site has offered dollar-for-dollar EBT matches (\$10 swiped becomes \$20 in tokens) to spend on fresh produce. Although WBFM is on hiatus for the 2025 season while ALT secures a permanent home, ALT's Community Agriculture work continues (including youth programs like Young Urban Farmers) and the SNAP-doubling model remains available at other Athens markets, so schools can still refer families to affordable produce options immediately. Together, these avenues strengthen food security and reinforce classroom nutrition messages with real-world, budget-friendly shopping (Athens Land Trust, 2025).

Beyond food access, ALT's gardens and youth development programs create safe, supportive spaces for active learning, complementing PE with outdoor movement and skill-building. The Young Urban Farmers and related youth programs provide paid, structured activities for Clarke County teens, blending agriculture, nutrition, entrepreneurship, and conservation, models schools can connect to for family engagement and after-school opportunities in healthy, supervised environments. For elementary families, school visits to Williams Farm or collaborations around community gardens can offer age-appropriate, movement-rich experiences that normalize active play and healthy eating. Programs emphasize equity and service to historically marginalized communities, and SNAP/EBT matching

dramatically lowers produce costs for eligible families, critical for affordability. Schools or teachers can contact ALT to coordinate classroom visits, farm tours, volunteer days, or family workshops, and can point parents to SNAP-matching at area markets while WBFM is paused. For bilingual outreach, schools can request Spanish-language materials/signage at events and pair referrals with interpreter support so Spanish-speaking families are fully included.

Athens Free Clinic

The Athens Free Clinic is a free and low-cost primary care service located in Athens-Clarke County and it is operated by the Augusta/University of Georgia Medical Partnership physician faculty, residents, and students (Athens Free Clinic, 2025). It was founded in 2018 with a mission of reaching those uninsured and under-insured who face barriers such as lack of transportation, lack of continuity in medical care, or access to primary care (Athens Free Clinic, 2025). AFC provides comprehensive care for patients of all ages, treating acute and chronic health conditions, and offering screening and prevention services (Athens Free Clinic, 2025). The clinic also works within the community by partnering with schools, shelters, health centers, and recovery programs (Derrick. L, 2025).

In March 2025, the clinic surpassed \$1 million worth of free healthcare (Derrick. L, 2025). The Athens Free Clinic is a perfect option for schools to refer students and families who lack regular access to healthcare. Many families in Athens-Clarke County, especially those with limited income or lacking insurance, struggle to find affordable and consistent medical care (Athens Free Clinic, 2025). The clinic's free and low-cost care removes the financial burden, allowing children and families to receive care without worrying about the cost. Since the clinic partners directly with schools, it informs parents of this option and allows families to have

consistent access to health care (Derrick. L, 2025). These partnerships allow students to stay healthy and in the classroom, since they are receiving the long-term support they need to manage their health and well-being (Derrick. L, 2025).

Pinewoods

Pinewoods Tutoring, formerly known as Oasis Católico Santa Rafaela, is a free after-school program that serves low-income K-5 students within the Pinewoods Community in Athens, Georgia. Founded in 2002 by a group of nuns known as the Handmaids of the Sacred Heart of Jesus, the program was created to support the academic and personal development of students from underserved and primarily Spanish-speaking, immigrant families (Pinewoods Tutoring, 2025). The program is run out of a cluster of mobile homes within the Pinewoods community and has become a safe space for families and students within this community, offering safe, structured, and supportive after-school care for students.

To be eligible for Pinewoods tutoring, students must be in a grade K-5 and live in the Pinewoods community of Athens, Georgia. The program runs Monday through Thursday from 2:30 to 5:00 pm. Each afternoon, students take buses from their schools to the program site where they participate in a well organized schedule that includes academic tutoring, homework help, recess, and snack time. Tutoring takes place between 3:00 and 4:15 pm, during which students receive unique lesson plans to strengthen their math and reading skills and individualized help with their homework from school. Tutors are encouraged to tailor lessons to each student's academic level and learning style, ensuring every student receives personalized guidance and academic support. The schedule is divided up to ensure tutoring meets these

expectations, enabling students to receive a range of tutoring help and learn and grow in an interactive learning environment.

Beyond helping students with their homework and learning goals, Pinewoods encourages the development of supportive relationships between mentors and students, fostering a sense of friendship and trust. Volunteers are paired with the same student throughout the semester, allowing them to build meaningful relationships that go beyond traditional tutoring. These connections often serve as a source of stability and encouragement for students, many of whom face challenges both inside and outside of school.

The mission of Pinewoods Tutoring, summarized into its motto “Healing Hearts”, reflects its comprehensive approach. The program not only aims to stimulate academic growth and enhance performance but also to nurture the social and emotional well-being of each child. Mentors are trained to be compassionate, patient, culturally competent, and understanding, and are encouraged to approach their role by being both a teacher and a friend. From the very first orientation session, volunteers are instructed to focus on encouragement and affirmation in order to recognize effort and achievement amongst students.

Positive reinforcement is another crucial component of the program. Tutors frequently use high fives, stickers, words of encouragement, and the checkmark and prize system, inspiring students to stay motivated, complete their work to the best of their ability, and have good behavior. These small incentives are incredibly meaningful as they help create an environment of encouragement, excitement, and pride which makes the learning experience for tutees both enjoyable and empowering.

The Pinewoods community itself faces unique challenges that make Pinewoods Tutoring essential. Many of the parents within the community work long, demanding hours at difficult jobs to support their households. As a result, these parents often do not have the time or energy to help their children with their homework or take care of them after school. Pinewoods Tutoring not only provides academic help but serves as a supportive and stable environment for these parents' children. The program ensures that Pinewoods' children are in a safe, structured, and nurturing environment each afternoon, where they receive not only educational support but also mentorship and emotional care.

Sustainable Solutions

There are several solutions that can be implemented for our case. Sofia needs to be gently and effectively guided to changing her eating and physical activity habits in order to protect her health and combat her obesity diagnosis. Sofia's situation highlights the urgent need for sustainable systems that support children like her through diagnoses and management, as well as prevent these cases from happening. Our paper discusses these sustainable solutions, focusing on Sofia's case in particular but also putting forth a framework for other children struggling with childhood obesity. Our primary focus is not just on medical care and intervention, but also on education.

School-Based Health Promotion Initiative

Implementing a school-based health promotion program that incorporates physical exercise, nutrition education, and cultural inclusivity into daily routines is a sustainable way to address Sofia's obesity and promote long-term wellbeing within the school setting. Because they reach almost all students, regardless of social or cultural background, schools are among the best

places to establish healthy habits (CDC, 2024). Improved school meal options, after-school activities, and nutrition education in the classroom might all be part of a planned project. To ensure that students like Sofia and their families receive culturally appropriate information, educators and administrators can collaborate with groups like the Athens-Clarke County Extension to bring multilingual nutrition programs into schools. Instead of focusing on restriction or weight loss, these lectures should emphasize energy, growth, and cultural appreciation in order to normalize healthy eating among all kids. Additionally, the program should promote healthier cafeteria selections by decreasing the number of fried and highly processed foods offered while increasing fruit, vegetable, and whole grain options. The program can improve health outcomes while fostering diversity and lowering stigma by incorporating these ideas into current school curricula and food services.

This approach's collaborative, educational foundation is what makes it sustainable. It creates long-term relationships between schools, families, and community organizations instead of concentrating on quick fixes. For instance, local resources like the Food Bank of Northeast Georgia and the Athens Farmers Market can help schools provide reasonably priced, healthful produce for cafeteria meals and cooking demonstrations in the classroom (Food Bank of Northeast Georgia, 2024; Athens Farmers Market, 2024). The program might also involve professional development for teachers that teaches them how to spot harmful habits, set an example of good behavior, and incorporate movement into lesson planning. Together, these initiatives eventually foster a school climate that benefits all kids, not just Sofia, by encouraging a healthy diet, regular exercise, and a positive body image. The CDC's Whole School, Whole Community, Whole Child (WSCC) model, which promotes schools to adopt a comprehensive, equitable approach to student well-being, is another national framework that is consistent with

the implementation of a school-based health project. This program provides a long-term route to lowering childhood obesity and enabling kids and families to make better decisions through regular education, community cooperation, and policy-level assistance.

Community Family Wellness Program

A community family wellness program that combines nutrition education, physical activity, and emotional support can help address Sofia's situation and promote lasting, sustainable health behaviors for her and other community members (CDC, 2024). Because Sofia's family plays a major role in shaping her lifestyle and supporting her through this health challenge, the program would focus on engaging both parents and children through different family-oriented activities and workshops. It would also partner with local organizations identified through asset mapping, such as the Athens Land Trust, Farm 2 Neighborhood's HEALTHYYouth program, and the UGA Cooperative Extension in Athens-Clarke County, to provide important community connections, spaces, expertise, and established resources to support the program's goals. These organizations could support interactive sessions on healthy cooking and eating, physical activity, positive body image, emotional well-being, and sleep hygiene. It would be essential that these sessions be available in both English and Spanish to reduce cultural or language barriers to participation by community members. The holistic program would emphasize balance, empowerment, and fun, teaching families not only the importance of healthy behaviors but also how to incorporate them into daily life.

A community-based family wellness program known as "CommUNITY Wellness" in the East Los Angeles area, serves as an excellent model for this approach. The program is run by the Gasol Foundation, an organization dedicated to eradicating childhood obesity in the United

States, Spain, and beyond, and its primary goal is to reduce the risk of childhood obesity through teaching basic healthy habits and engaging both parents and children in enjoyable, hands-on activities (Gasol Foundation, n.d.). According to program data, 93% of participants from the pilot program reported that they would recommend the program to others and would participate again, highlighting its positive impact and high participant satisfaction (Gasol Foundation, n.d.). Adapting a similar model within the Athens community could help create a culture of health and wellness that benefits Sofia and other families alike.

As for community partnerships, several established organizations could play a role in supporting the program. The Athens Land Trust could provide interactive gardening education that would help families understand where their food comes from and the importance of incorporating lots of fruits, vegetables, and whole grains into their diets. The HEATHYYouth program, part of Farm 2 Neighborhood, could hold peer-based activities that focus on nutrition education as well as informative workshops on positive body image. The UGA Cooperative Extension could contribute by having extension agents offer nutrition workshops and meal planning guidance to families. By partnering with these existing community organizations, this program will be strengthened and have the momentum it needs to make a lasting impact in the lives of many families including Sofia's. Much of the initiative's sustainability and success will come from utilizing these existing assets and relationships.

This community wellness program aligns with the CDC's Whole School, Whole Community, Whole Child (WSCC) model since it will be promoting health and well-being through collaboration between families, schools, and community organizations (CDC, 2024). The initiative also aligns with the CDC's guidelines for family-based healthy weight programs, which recommend multi-component behavioural interventions of 26+ contact hours for children

with overweight or obesity. (CDC, 2024). By partnering with the Athens Land Trust, Farm 2 Neighborhood's HEALTHYouth program, and the UGA Cooperative Extension in Athens-Clarke County, the initiative supports the WSCC model's focus on comprehensive and equitable approaches to student wellness. Community programs can be a great way for those dealing with obesity and weight-related issues to learn from others and gain a sense of motivation and accountability (Obesity Action Coalition, n.d.). Overall, this program and its partnerships will encourage healthy cooking and eating, regular physical activity, and positive body image which will help Sofia build healthier habits to overcome her struggles with childhood obesity. Moreover, this program will help other children facing similar circumstances as well as promote the overall health and well-being of every individual within the community, leading to lasting, sustainable change.

Home & Family Based Wellness Program

Implementing a home and family focused wellness program could be of great benefit to Sofia. A home and family based wellness program would target improving eating habits, attitudes towards healthy eating, and physical activity inside the home. This program is an exceptional way to make lasting, sustainable changes inside Sofia's household, where her whole family can gain the benefits of being mentally and physically healthier. In the state of Georgia, there are multiple programs implemented to help families reduce childhood obesity and healthy living. Resilient Northeast Georgia is a program designed to have collaborative planning with families (Resilient Northeast Georgia, 2025). Resilient Northeast Georgia targets multiple areas for families such as healthy living education and student wellness planning (Resilient Northeast Georgia, 2025).

Farm2Neighborhood is another fantastic way for Sofia's family to have sustainable, healthy meals and produce every week. Farm2Neighborhood provides weekly hot meals and vegetables for free to families, no documentation required (Farm2Neighborhood, 2025). Therefore, since it is a weekly program Sofia's family can implement it into their schedule. This allows for Farm2Neighborhood to have a lasting impact on Sofia's family. Additionally, eating produce each week may expose Sofia's family to new fruits and vegetables, which they may begin incorporating into their daily family meals. Exposing Sofia and her family to healthier options for free is an incredible way to create lifelong habits in their home, in an unpressured, nonjudgmental zone.

Through these programs, Sofia and her family can create lifelong solutions in their household that promote wellness, a healthy diet, and a healthy mindset towards food. It is vital to focus inside the home as it allows for building a strong foundation of healthy eating in the household.

Youth Physical Activity Program

Implementing a youth physical activity program would be beneficial for Sofia, as it offers a sustainable, community-based approach to improving her health while at the same time addressing the broader issue of childhood obesity. Because this issue is so complex and influenced by multiple factors, such as diet, physical inactivity, and environmental barriers, it would be important to have a program like this for children like Sofia. A youth-centered program that promotes movement, peer support, and body confidence will help establish lifelong healthy habits and foster community connection (CDC, 2025).

Expanding on this, the program should be designed to meet Sofia's developmental needs while making physical activity enjoyable and inclusive at the same time. Incorporating a variety of activities can help children find the type of exercise that they genuinely find enjoyable, which ultimately increases long-term participation. Structured sessions led by trained instructors or volunteers could focus on building both physical skills and confidence rather than competition. National guidelines recommend that children and adolescents engage in at least 60 minutes of moderate to vigorous physical activity each day, and school or community-based programs can make this goal achievable in a supportive setting. Integrating fun challenges, team-based goals, and rewards for participation can also motivate Sofia and her peers to stay engaged and view movement as something positive.

Family involvement would play an important role in the program's success as well. Parents would be invited to attend family fitness events or workshops, reinforcing positive habits and providing encouragement beyond the program itself. These family-based approaches improve adherence to physical activity and nutrition recommendations among children with obesity (Mayo Clinic, 2025). Educating parents about affordable ways to integrate exercise, like evening walks, park visits, or dance breaks at home, can make healthy living more realistic for families facing time or financial constraints. This component also helps build accountability and shared commitment to long-term lifestyle change, allowing Sofia to see her health journey as a collective effort rather than an individual struggle.

Accessibility and equity must also be central to the program's design. Many children face barriers such as lack of safe play spaces, transportation, or financial resources to participate in organized sports. Partnering with schools, local parks, and community centers can help reduce these barriers by providing free or low-cost opportunities for children to be active in familiar

environments. For instance, the Athens Land Trust offers community agriculture programs and urban farms aimed at increasing access to healthy foods and nurturing local wellness, which could serve as a partner for the movement program (Athens Land Trust, 2024). Similarly, the nonprofit Farm 2 Neighborhood provides affordable, pre-packaged healthy meals and fresh produce to food-insecure neighborhoods in Athens, addressing nutrition access which complements physical activity efforts (Grady Newsource, 2021). Collaborating with these organizations can help ensure that children like Sofia, and their families, have both movement opportunities and nutritious food access in one integrated community framework.

Ultimately, a youth physical activity program for Sofia would go beyond exercise, it would serve as a foundation for lifelong wellness. By combining physical movement, family engagement, and community collaboration, such an initiative could empower Sofia to make healthier choices and feel supported in her journey. Addressing the multifaceted causes of childhood obesity through inclusive, community-based strategies ensures that programs are not just interventions but pathways to lasting behavioral change. Through consistent encouragement, accessible resources, and culturally responsive support, Sofia can gain the tools to lead an active, confident, and healthy life (CDC, 2025).

Nutrition Education and Policy Initiative

A nutrition education and policy initiative would be highly beneficial for Sofia and her peers by promoting healthier eating habits throughout the entire school community. This type of initiative focuses on improving food literacy, providing access to nutritious meals, and creating sustainable changes of foods that are in schools. By incorporating nutrition education into everyday learning and school policies, students can develop better awareness and understanding

of healthy eating without feeling targeted or singled out which can benefit them in the long-run. These programs also help create an environment where healthy choices become the norm, teaching students that nutritious foods can be enjoyable, affordable, and culturally relevant.

In Georgia, there are several programs that work to improve school nutrition through education and local food sourcing. The Georgia Farm to School Program connects schools with local farmers to provide fresh, locally grown produce in cafeterias and classrooms (Georgia Organics, 2025). This program not only gives students access to healthier meals but also educates them on where their food comes from and the importance of supporting local agriculture. Schools that participate often include gardening lessons and cooking demonstrations, which encourage children like Sofia to try new foods in a fun, hands-on way. It can also make it seem as though there is less pressure on eating healthy since the educational material is being taught to everyone, and not singling people out. In addition, by involving students directly in growing or making meals with certain foods, these programs help students take responsibility and pride in making healthy, sustainable choices that benefit their bodies and well being.

Another impactful program is the Harvest of the Month Initiative, which highlights a different seasonal fruit or vegetable each month (Georgia Department of Education, 2025). This allows students to taste and learn about new produce while teachers incorporate the featured food into classroom lessons. Programs like these help create a school culture centered on curiosity, health, and sustainability. By educating and engaging Sofia and her classmates together, nutrition education and policy initiatives can build lifelong healthy habits that go beyond the cafeteria and into their homes and communities.

Reflections

Olivia Burgess

Working on a needs assessment for Case Study 7 was an enriching and valuable experience. I truly enjoyed working to fully understand Sofia's situation and finding the resources and information her and her family would need in this scenario. Childhood obesity is such an important topic in the United States where our food system pretty much sets people up to become unhealthy and gain unnecessary weight, especially for those that are in a lower socioeconomic class, make a lower income, are non-white, or who have immigrated. The numbers and trends are clear: childhood obesity is an epidemic in the United States with 1 in 5 children being obese during childhood leading them towards a path of worse health outcomes and obesity in adulthood (CDC, 2024). Hispanic and low-income individuals in particular, are at a higher risk for childhood obesity in America (CDC, 2024).

The fact of the matter is affording healthy, nourishing foods is expensive and not easily accessible to many individuals and families. So many individuals rely on ultra-processed foods because they are cheap and the only option they have access to. Beyond this, many individuals do not understand the importance of good nutrition, especially those who do not have comprehensive education on the issue whether that be because of a lack of educational resources in schools and the community or because of something like a language barrier in Sofia's family's case. Similarly, physical activity is not prioritized for many individuals and its importance may not be understood. Childhood obesity is influenced by a myriad of factors beyond an unhealthy diet and a lack of physical activity including genetics and medications, however these two factors are essential in this issue.

While gathering information from community agencies, we realized that information wasn't always available or easily accessible, especially regarding specific program details and

eligibility criteria. For example, most of what was written about Pinewoods Tutoring was based on personal experiences and prior knowledge rather than publicly available information, since their website and social media pages are not up to date. Additionally, we found that we really had to dig to find agencies that would realistically support Sofia and her family in this situation. Because of this challenge, creating the resource handout felt especially meaningful and important. I can see how valuable a tool like this would be in my future career, particularly in a clinical setting where having reliable, up-to-date resources is essential for connecting patients with the support they need. Health issues go so far beyond medical care and intervention- they are shaped by a person's socioeconomic status, access to resources, environment, and overall circumstances. Having structured resource guides or pamphlets available for a wide range of health concerns can make a tangible difference in helping families navigate these broader determinants of health.

Overall, this project helped me understand just how complex the issue of childhood obesity truly is, with its many intersecting causes, influences, and long-term effects. Additionally, I learned about the importance of multilevel intervention and prevention measures for childhood obesity, including approaches that involve individuals, families, schools, healthcare systems, and the broader community. Another key takeaway was recognizing the need for sustainable solutions. It is easy to focus on large-scale, potentially unfeasible, systemic changes such as increasing access to healthy food by lowering prices in grocery stores or creating new grocery stores around the food-desert areas of Athens, or emphasizing physical activity more in school curricula. While these ideas are valuable, it is equally or more important to find realistic, practical solutions that can be implemented now to support individuals like Sofia and her family.

Resource Handout

PINEWOODS TUTORING

1465 Hwy 29 N Lot F, 8, Athens, GA, 30601
(706) 714-6624, pinewoodstutoring@gmail.com

Pinewoods Tutoring offers free after-school tutoring to K-5 students who live within the Pinewoods community of Athens, GA. The program runs Monday through Thursday from 2:30 to 5:00 pm. Each afternoon, students take buses from their schools to the program site where they participate in a well organized schedule that includes academic tutoring, homework help, recess, and snack time. Tutors tailor lessons to each student's academic level and learning style, ensuring every student receives personalized guidance and academic support. Beyond helping students with their homework and learning goals, Pinewoods encourages the development of supportive relationships between mentors and students, fostering a sense of friendship and trust.

FARM 2 NEIGHBORHOOD

585 Vine Street, Suite 5, Athens, GA, 30601
Farm2neighborhood@gmail.com

Farm to Neighborhood is an Athens-Clarke county based nonprofit organization focused on increasing access to nutritious and affordable foods to the Athens and surrounding community. Local and minority farmers supply fresh produce to Farm 2 Neighborhood to help low-income adults, families, and seniors. Farm 2 Neighborhood has several programs such as Senior Fresh, which provides low-income seniors with weekly bags of fresh produce, and HEALTHYouth, which provides teenagers and younger with culinary skills that set them up for a healthy, successful lifestyle. Additionally, Farm 2 Neighborhood has multiple 1000 Meals food drive events, where any person or family can receive free, hot, and healthy meals.

UNIVERSITY OF GEORGIA COOPERATIVE EXTENSION

ATHENS-CLARKE COUNTY 275 Cleveland Road, Bogart, GA 30622
(706)-613-3640, <https://extension.uga.edu/county-offices/clarke.htm>

The University of Georgia Cooperative Extension in Athens-Clarke County is a publicly supported outreach program that connects the university's research-based resources with the local community to improve health, nutrition, and overall well-being. Services include bilingual nutrition and wellness education, family resource programs, food-safety instruction, and youth development activities through 4-H programs. The Extension's Family and Consumer Sciences (FACS) and SNAP-Ed programs teach practical, affordable strategies for healthy eating, cooking, and physical activity for low-income households and school communities. Educators and parents can access free or low-cost workshops, classroom visits, and cooking demonstrations that emphasize culturally familiar, nutritious meals and healthy lifestyle habits. The Extension partners with local agencies such as the Food Bank of Northeast Georgia and the Athens Farmers Market to increase access to fresh produce and nutrition resources. Most programs are free of charge and open to all residents regardless of immigration status.

WHOLESOME WAVE GEORGIA

777 Cleveland Ave SW, Suite 400, Atlanta, GA, 30315
(404) 551-5596, info@wholesomewavega.org

Wholesome Wave Georgia is a statewide nonprofit that works to make fresh, healthy, locally grown foods more affordable for low-income families. Through partnerships with farmers markets, grocery stores, and healthcare providers, the organization helps households access nutritious produce while supporting Georgia farmers. Its main program, Fresh for Less, doubles SNAP dollars spent on fruits and vegetables so families can buy more fresh food at participating markets. Wholesome Wave Georgia also offers produce prescription programs, where doctors can prescribe fruits and vegetables to patients at risk for chronic conditions. The organization serves diverse communities across the state and helps ensure that culturally familiar, nutritious foods remain accessible to all.

ATHENS FREE CLINIC

1425 Prince Ave, Russell Hall 138, Athens, GA, 30602
(706) 713-2208, slester@augusta.edu or slester@uga.edu

The Athens Free Clinic provides free and low-cost primary care to uninsured and underinsured residents of Athens-Clarke County. Operated by the Augusta/UGA Medical Partnership, the clinic offers comprehensive services including acute and chronic care, screenings, and preventive health education. Since its founding in 2018, the clinic has partnered with local schools, shelters, and community organizations to expand access to medical care for families facing financial or transportation barriers. In 2025, it surpassed \$1 million in free healthcare provided. The clinic serves as an important resource for students and families who lack consistent access to medical providers, helping them stay healthy and engaged in school by offering dependable, affordable care close to home.

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