

**Reducing Picky Eating in Children:
A Nutrition Education Seminar for Parents and Caregivers of Head Start Participants**

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Abstract

Northern Virginia Family Service (NVFS) is a Head Start program that aims to empower families with nutrition education in support of early childhood development. A child's growth and development are strongly influenced by foundational elements such as nutrition. Adequate intake of essential nutrients during early childhood is critical for promoting physical health and cognitive development. This project focuses on identifying strategies that help parents of children ages three to five years old in the Northern Virginia Family Service Head Start program who struggle with picky eating. Parents of enrolled children were surveyed to gather insights into the nutritional challenges they face at home. The seminar was tailored to address picky eating strategies that could be implemented at home while building confidence among parents to foster a positive meal environment. Following the session, a survey was disseminated to evaluate the effectiveness of the seminar. Although turnout was low, the outcomes were encouraging and suggest the potential for supporting other parents who face challenges with picky eating. Expanding this effort to additional Head Start parents could yield valuable insights and practical support for families dealing with picky eating behaviors.

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Introduction

Background and Setting

A child's growth and development are dependent on strong foundational elements including nutrition. Providing a diet rich in essential nutrients at a young age is key to a children's overall health.^{1,2,4} Nutritional deficiencies, social difficulties of child development, and environmental stresses, can impact cognitive function and physical health.^{1,2} This project investigates strategies to reduce picky eating among children within the age of three to five years.

Head Start is a federally funded non-profit organization in the United States that provides early childhood education, health, nutrition, and family support services to low-income children and their families.^{3,7} It primarily serves children aged three to five, helping them prepare for school and life beyond. Northern Virginia Family Service is an organization based in Arlington, Virginia that facilitates Head Start programming. The 2025 Poverty Guidelines in Virginia, establish income thresholds based on household size to determine eligibility for various federal assistance programs.²⁵ For a single-income household, the poverty level is set at \$15,650. This amount increases by \$5,500 for each additional person in the household. For families with more than eight members, an additional \$5,500 is added for each extra person. These guidelines help assess financial need and access to support services.²⁵

Statement of the Problem

The Arlington Head Start Child Development Center has a current enrollment of 134 children in the program with 21.64% (n=29) from households of an income above baseline eligibility requirements and 73.36% (n=98) of children from households meeting eligibility

requirements.²⁴ The Head Start parents and caregivers reported that 53 received food assistance from Women, Infants, and Children (WIC) and 46 from Supplemental Nutrition Assistance Program (SNAP) food stamps. The two primary languages spoken at home were English (38 children) and Spanish (26 children). For ethnicity, 29 children were from the Latino population and 50 children were from the White population.²⁴ NVFS Arlington Head Start Child Development Center has the largest enrollment for Head Start out of nine centers in Northern Virginia. This was the primary reason Arlington was selected to carry out data collection in English and Spanish.

Persistent picky eating among children can interfere with optimal physical and cognitive development over time. This can continue into adolescence and adulthood, making it difficult to build a foundation for lifelong healthy habits. Additionally, it places a significant burden on parents and caregivers, who may struggle to serve nutritious meals that meet the needs of the entire family while accommodating a picky eater. Parents and caregivers of the Head Start program report to their family advocates wanting additional resources on approaches to help their child work through picky eating.

Significance of the Problem

Recognizing picky eating among children may help combat early signs of malnutrition and nutritional deficiencies, and encourage an overall healthy diet in order for the child to continue optimal growth from late childhood (6–9 years) into adolescence (10–19 years).^{2,8,4} Head Start aims to prepare children for life beyond that of their early middle and late childhood years. Upon entering the biological stage of puberty, the body undergoes intense emotional and physical changes in which proper nutrition plays a significant role in a child's life. Not only may

this impact child growth and development but also have negative effects on academic progress and physical performance.^{2,8,4}

Purpose of the Project

The purpose of this project is to develop a nutrition education seminar for parents and caregivers of Head Start participants that provides various strategies that can be implemented at home during mealtime to help combat picky eating. The seminar will be tailored to low-income, Head Start parents and caregivers who provide and engage in mealtimes with the children. The seminar will follow a facilitated dialogue format integrating opportunities for parent engagement and discussion.

Project Objectives

The primary objective of this seminar is to support Head Start parents in addressing picky eating behaviors in young children through practical, evidence-based strategies. In addition to educating parents and caregivers on children's nutritional needs including essential nutrients, and balanced meals, the seminar will guide participants in understanding how to identify and respond to common causes of picky eating, such as sensory sensitivities, developmental stages, and family mealtime dynamics.

The seminar also aims to serve as a learning model for developing and implementing nutrition-focused interventions. Participants will gain insight into the seminar development process, including how to tailor educational content to the needs of families, evaluate which strategies are most effective, and adapt tools to diverse household environments. Practical components such as encouraging dietary variety, involving children in meal prep, and managing

mealtime stress will be paired with reflective discussions about what works, what doesn't, and why.

By the end of the seminar, parents had tools to support their children's nutritional well-being, and facilitators had an improved understanding of how such seminars can be designed and evaluated. Parents and caregivers were encouraged to implement one or more strategies to improve mealtime experiences and contribute feedback that can inform future adaptations of the seminar.

Definition of Keywords

Head Start: A program to prepare young children between the ages of three to five years of age in America for success in school and beyond by providing services in early learning, health, and family well-being, while actively involving parents.³

Malnutrition: An imbalance between the nutrients your body needs and the nutrients it gets. It can be caused by lack or excess of macronutrients (proteins, carbs, fats) or micronutrients (vitamins, minerals).⁴

Picky Eating: Classified as part of a spectrum of feeding difficulties. It is characterized by an unwillingness to eat familiar foods or to try new foods, as well as strong food preferences.⁵

Food Exposures: Nutritional exposures are defined or measured through the intake of foods, nutrients, and non-nutrients, additives, contaminants, and chemicals in foods that were incorporated into food as part of the agricultural process or were formed during food processing or preparation.⁶

Child and Adult Care Food Program: A federally funded initiative that reimburses participating childcare centers, family day care homes, and adult day care facilities for serving nutritious meals and snacks to eligible children and adults in their care.²⁰

Literature Review

Head Start

Head Start is an educational childcare program designed for children ages three to five years old, focusing on early learning, health, and family well-being. The program is funded by the federal government through the U.S. Department of Health and Human Services (HHS), Administration for Children and Families.³ HHS then distributes funds to local leaders who then tailor the program to meet the specific needs of their communities. Engaging parents and caregivers is an important aspect of Head Start, as family involvement is key to achieving positive child outcomes.⁷ These programs are available to families who meet federal poverty line. Requirements are based on selection criteria involving several factors to include but are not limited to income status, parent status, and specific family involvement criteria.^{3,7}

Head Start prioritizes expanding nutrition services. Seminars must address individual dietary needs, including those of children with disabilities and special dietary requirements.⁷ Seminars must engage with families to discuss children's nutritional status, educate them on healthy eating, and help them access affordable, nutritious food options. Parent and family engagement is crucial for applying content learned in seminars. Emphasis is placed on the importance of whole foods and minimizing ultra-processed foods and added sugars.⁷

Head Start grant recipients are required to participate in the Child and Adult Care Food Program (CACFP), a federal nutrition assistance program administered by the USDA that provides reimbursement to organizations for serving nutritious meals and snacks to enrolled children.^{3,7} CACFP ensures meals meet specific nutritional standards, and Head Start funds can

cover additional costs not reimbursed by CACFP, including food for family engagement activities.

Head Start seminars can help foster enthusiasm for healthy eating and nutrition through creative approaches that align with performance standards in the Head Start early learning outcomes framework. These include making nutrition education activities fun and hands-on by integrating them with reading, math, or science⁷ Sensory activities, storytelling, pretend play, meal planning, and growing plants are examples of strategies utilized by the seminar. Mealtime can be educational by involving children in meal prep and using family-style dining to teach independence and social skills. Seminars can increase access to fresh foods through field trips, partnering with local businesses, and engaging families in on-site gardens.⁷ These strategies help children and families learn to access nutritious foods, promoting overall health and wellness.

Outcomes from children participating in Head Start

A 2019 Head Start Impact Study highlighted that the developmental outcomes of children are significantly influenced by the quality of the Head Start program they attend.²³ Kids who attended high-quality Head Start seminars had noticeably better cognitive outcomes than those in lower-quality programs, center-based care, or home care. In the Lee (2019) study, "high-quality Head Start" was defined as classrooms with an "Early Childhood Environment Rating Scale–Revised" score above 4.5, indicating strong classroom environments with enriching materials and responsive teacher-child interactions. This threshold was used to compare developmental outcomes, and children in these high-quality settings showed significantly better cognitive development than those in lower-quality or alternative care environments. The study also highlighted that children from more supportive or engaged families saw even greater benefits,

both cognitively and socially. Investing in well-trained staff, strong curriculum, and supportive environments can make a strong difference in children's development. Focusing on building relationships with families and making sure all seminars meet a high standard, can help children thrive in adulthood.²³

Another study examining the long-term impact of Head Start on children in foster care found that participation led to significant improvements in cognitive, social-emotional, and physical health outcomes by ages 8–9, even though early gains at ages 3–6 were moderate.²² The most sustained benefits were seen among children whose caregivers were more engaged such as in activities like book reading. Among the girls, the importance of supportive, consistent adult involvement was highlighted. These findings suggest that early interventions tailored to vulnerable populations, such as foster children, can have lasting developmental effects when paired with strong caregiver relationships.²² Connecting this to future Head Start programming, initiatives like picky eating seminars could mirror this model by engaging caregivers more directly. Prior to this seminar, parents and caregivers have been consistently invited to have discussions on struggles they face at home with their family advocates.

Diet Quality in Childhood

Diet quality in childhood has been associated with various health outcomes such as bone health, cognitive development, and cardiovascular health. In one systematic review, seven out of twelve studies found a significant association between diet quality and bone health markers, particularly when diet quality was assessed through dietary pattern.⁸ Children and adolescents adhering to healthier dietary patterns, such as the Mediterranean diet, showed significantly higher bone mineral density (BMD). The Mediterranean diet is an eating pattern that emphasized

the inclusion of plant-based foods and healthy fats. This includes fruits, vegetables, nuts, legumes, as well as some poultry and lean fish. In one of the studies, it was found that participants with high adherence to a Mediterranean diet, had a BMD that was 5–10% higher compared to those with poor diet quality. Alternatively, children and adolescents with poor diet quality, consuming a high intake of processed foods and sugary beverages, had lower BMD. One of the studies also reported that participants with poor diet quality had a BMD that was 3–7% lower compared to those with healthier dietary patterns.⁸

Another systematic review highlighted the importance of free school lunch meals on several study outcomes including participation rates in school meals, attendance, academic performance, diet quality, food security and lower BMI.⁹ The meals provided had met or exceeded national nutrition standards and followed balanced meal patterns to include an appropriate target range of protein, carbohydrates, whole grains, and fruits and vegetables. The studies highlight positive associations between the universal school lunch and academic performance. A study from the Brookings Institution reported an improvement in math performance by 0.08 standard deviations and English Language Arts (ELA) test scores by 0.07 standard deviations among students receiving free balanced meals further demonstrating that power of a healthy balanced meal on test scores.^{9,21} These findings underscore the importance of providing balanced, nutritious meals early in childhood, supporting the need for programs that educate parents of Head Start children on establishing healthy eating habits from a young age.

Cognitive performance can also be factored in when studying diet quality among the younger population. A study investigated cognitive brain function and brain morphology in infancy and mid-childhood associated with dietary patterns and habits.¹⁰ The study found that children who consumed a healthier dietary pattern including whole grains, protein,

carbohydrates, dairy and low fat content had larger brain capacity and increased cognitive performance than those who consumed unhealthy dietary patterns that included high amounts of processed foods and added sugar in snacks and meals.¹⁰

Picky Eating

Picky eating is a common behavior in early childhood and can be linked to broader developmental patterns. There is a set of several intrinsic and extrinsic features that relate to eating behaviors. This can contribute to how children view different food groups and decide which groups or individual foods they like and are curious about. Intrinsic features of picky eating in children include heightened sensitivity to taste and smell which can influence how certain foods are seen as unappealing due to their strong odors and flavors.^{14, 15, 16} This sensory processing issue can lead to a rejection of foods, most often fruits and vegetables which provide those key nutrients for child development. Additionally, neophobia describes a fear of trying new foods and is a common trait associated with picky eaters.²⁶ Children who exhibit these traits may show reluctance to experiment with new textures and flavors. This can hinder a child's decision-making skills to explore nutrient-rich foods outside their familiarity range. Another factor that can impact children's eating behavior is preference for specific textures and flavors. Rejecting food that does not meet a child's sensory expectations may also contribute to developing picky eating habits. For example, if the food is too crunchy, making it hard to chew thoroughly, or too soft and not aligned with their texture preferences, children may be less likely to eat it.^{14, 16}

Extrinsic features are external influences that increase and or decrease the likelihood of children developing picky eating habits.¹⁴ Authoritarian parenting is a style that highlights strict rules and expectations, putting pressure on children to consume disliked foods. This style focuses on control by the parents on choices their children should be making independently with food

preferences. Pressure on the child can lead to food resistance especially when mealtime is at a designated consistent place and time. This can create stress and anxiety about participating in mealtimes. Although the parent has a direct influence on the child, there are several other factors that influence the child's eating habits. The role of the parent in seminars for head start should also acknowledge parents' efforts and recognize the support they offer to their child. parents' efforts are acknowledged and supported. Another extrinsic factor can be clubs, camps or recreational activities and sports that involve providing food. Picky eating can arise from a mix of intrinsic and extrinsic factors, or it may stem primarily from one type alone.^{14,16}

Nutrition Programming for Picky Eating

Various nutrition programming strategies exist to expose children to new foods and provide opportunities to explore curiosity. Although there are several approaches parents can take to optimize balanced eating habits in a child, prioritizing and implementing a few can provide strong results over attempting a new strategy daily. Prior to mealtime, allowing the child to pick and help prepare new foods can help children process emotions based on the food that is on the plate in front of them. Introducing a new food item takes time and consistency, particularly when incorporating the item once or twice a week for a period of time.^{18,27} After food is prepared and presented at the dinner table, children can reflect on the positive emotions they experienced in the grocery store. Another strategy that can showcase positive emotions is allowing children to help with preparation of the food. This can be as simple as washing produce or helping peel the skin from a vegetable. WIC works resource system highlights how positive feelings such as excitement, feeling powerful, and taking initiative make children more curious to try what is offered during mealtime.^{18,27}

Trying new foods can be a challenge for children especially if they are prone to only consuming a few foods in their daily diet. One strategy, called micro-portioning, is to start with a small portion at the beginning of the meal.^{11,18} A small portion may not seem as overwhelming when compared to serving half a plate of unknown food to a child. A child is most hungry at the beginning of the meal, waiting to offer it as the child has begun eating can impact hunger signals and avoidance as they have already begun to feel the early satiety that they have enjoyed. This new introduced food should also be served with something a child is already familiar with, possibly even a favorite food they enjoy eating regularly. Just as adults carry out habits over time, children do as well. Introducing a new food item takes time and consistency. Children will recognize the same food they dislike, if it's being brought out every day and may seem like a parent is pressuring them to eat it.

Finally, a number of strategies have been studied in the literature such as incorporating a child's interests into food exposures.¹⁸ Cutting and making fun shapes out of vegetables can be a way to spark interest in the meal. For example, if children enjoy astronomy caregivers could cut vegetables into the shapes of the moon, sun, and stars. This will draw attention and curiosity into the food items. Having a theme meal can also assist in sparking attention. For example, caregivers can set up a superhero theme to mimic what the superhero eats to get big and strong. This can exhibit the idea that "if a superhero is eating this, I can too" on children. Finally, parents and caregivers can impact a child's likelihood of trying new foods by modeling these behaviors themselves. Children notice when parents and siblings who are positive mentors in their life try new foods as well.

Current literature shows that the most effective current programs practice a single-component intervention.¹⁷ The three intervention strategies that have exhibited effectiveness in

combating this challenge in children were a sensory analysis approach, nutrition approach, and a parenting approach. The sensory approach presented as a common approach in reviewing the literature.^{10,11} This approach highlights the importance of constant exposure through play and is most appropriate for those who do not enjoy how the food tastes or disapprove of the food texture. It allows the child to be presented with food to interpret and process it how they would like to. Eating includes eight different senses that all contribute to how a child interacts with food during mealtimes. The eight senses include taste, touch, smell, sight, sound, proprioception, vestibular system and interoception. This approach helps children to familiarize themselves with new foods using their known senses.

The parenting approach focuses on setting boundaries, specific parenting skills, and positive reinforcement and encouragement. It is most often used to create a routine for mealtimes that allows consistency within a child's growing years in relation to eating habits.¹¹ A model of positive maternal enforcement has provided strong evidence to aversions of picky eaters. An Australian study looked at relationships between mother and child regarding maternal healthy eating. The child's eating behavior at one year of age predicted vegetable consumption at age two. Additionally, when the child reached between the ages of two and four, maternal healthy eating was correlated to lower numbers of children who experienced picky eating behaviors the following year. The same study found that maternal pressure directed at the child to eat was linked to concerns about their child being underweight, based on comparisons to average height and weight for children of the same age.

One study looked at two cohorts of four-year-olds who were screened using the Preschool Age Psychiatric Assessment for sensory analysis and Children's Behavior Questionnaire for temperament.¹⁵ This was focused on examining a child's pickiness in food

items. The results showed that about half the children who were picky at age four were also picky two years later. Based on interventions, the parenting approach was shown to reduce the likelihood of children's pickiness two years later while those parents who had increased sensitivity had increased odds for pickiness. Increased parental sensitivity refers to how closely parents respond to their child's cues, but in some cases, overly sensitive or anxious responses may unintentionally encourage picky eating.

In a systematic review on childhood picky eating behaviors, parents frequently report that their children developed picky eating habits in their toddler years with little warning.¹⁴ They described it as a sudden onset of new habits. Parents had suspected that the child's picky eating habits would have slowly diminished, however they continued as the child got older. The review discusses the relationship between the child's fussy eating behavior and parent feeding practices. These parent feeding practices consisted of secretly influencing food items, practicing role model play as well as pressuring children, and reward and punishment objectives. The studies revealed that parent feeding practices play a role in a child's acceptance and rejection; however, the degree of influence often varies. The review found that children's acceptance or rejection of food items was influenced by a combination of factors, including the child's individual temperament and sensory sensitivities, as well as the specific feeding practices used by parents. Positive modeling and gentle encouragement tended to promote acceptance, while pressure or punishment often increased food rejection.

Current literature shows that picky eating strategies such as the sensory approach and the parenting approach have shown positive results to reduce these behaviors among children.^{15,16,18} However, specific strategies that have helped some children may not help the entire population

of picky eaters. More research on strategies to combat picky eating should be further researched to understand specific theories behind them.

Summary

Early childhood implementation seminars, such those created by Head Start, can play an important role in addressing picky eating and diet quality in childhood. Head Start seminars introduce nutrition programming to assist in early eating habits. Picky eating can significantly impact the quality of diet in childhood and lead to a delay in child development through physical and mental factors. This can lead to nutritional deficiencies which may hinder cognitive development, growth and height, and specific biometric factors such as bone density. Incorporating nutrition education and promoting new strategies to combat picky eating through programs such as Head Start can help develop a nutrient dense balanced diet during childhood and continue these habits into adolescence and adulthood.

Project Design

Ecological System Theory

Research has explored various theoretical frameworks to help identify the factors influencing children's eating habits. This project applies Bronfenbrenner's ecological system theory as its theoretical framework. The Ecological System Theory is considered one of the strongest frameworks to uncover specific eating behaviors.¹⁹ The development is divided into five interconnected systems: the microsystem, mesosystem, the ecosystem, the macrosystem and the chronosystem. These five systems collectively shape a child's eating behaviors and overall development.

Each system plays a role in the interaction between influences, helping to explain how a child's thoughts and ideas develop into habits shaped by their environment.¹⁹ The microsystem is

a child's immediate environment such as family life, school curriculum, and relationships. The mesosystem dives into specific relationships between home and school, such as what is continuously being shown in school and then implemented again at home. Patterns and consistency shape children's habits and behaviors until they are ingrained in their temporal lobe. The ecosystem is a child's external environment that indirectly affects the child like a parent's workplace and how a parent brings home positive or negative emotions based on what occurred at work. This can lead to consistent positive days or days that negatively impact the parents' actions at home. The fourth system, the macrosystem, highlights the broader societal and cultural influences, including socioeconomic status and cultural norms that are often shaped in the household based on parent choosing. Finally, the chronosystem, which are temporal changes and transitions over time, such as changes in family structure or economic conditions. This may include factors such as income status. Framing the parent's role in a supportive and respectful way is essential to building trust and engagement. Rather than presenting strategies as solutions to problems, the seminar emphasizes that parents are already doing important and meaningful work in caring for their children. The goal is to build on existing strengths by offering additional tools and ideas that parents can adapt to their unique family routines and values. ¹⁹

Methodology

This project collected qualitative and quantitative data through online and printed surveys. Data collection will consist of a set of two surveys that parents will complete. Parents and caregivers of the Head Start seminar were asked to complete a series of questions through the online survey platform QuestionPro. The survey asked participants to identify if they have challenges with picky eaters at home and current strategies they have implemented. Any Head

Start parents and caregivers who expressed interest were invited to the seminar on current curriculum to address children with picky eating behavior.

After completion of the seminar, participants completed a second survey. This survey asked the participants to reflect on what they learned during the session. The questions highlighted what strategies they took away from the seminar and what they chose to implement at home. The survey encouraged parents to attempt small approaches that may be helpful for their child's eating behaviors.

Head Start's nutrition objectives focus on promoting healthy growth and development by creating a positive mealtime environment and exposing children to a variety of nutritious foods. The family advocate expressed to the registered dietitian nutritionist that parents had been showing interest in learning more nutrition education for picky eaters. The initial survey was created and distributed via email by the family advocate to parents on March 20. Parents were given one month to complete the survey, with a deadline of April 20. Throughout the month, multiple reminder emails were sent to parents and caregivers, and the Head Start family advocate also provided parents with verbal, in-person reminders to complete the survey. A Head Start family advocate is a staff member who supports families by connecting them to community resources, providing guidance on parenting and child development, and helping to address barriers to family well-being. They play a vital role in fostering strong family engagement and promoting positive outcomes for children enrolled in the seminar. The survey was closed on April 20 to begin sorting parent interest and understanding the challenges parents face at home.

Table 1: Pre- Seminar Survey Results (n=5)

Question	Response
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Does your child show any signs of picky eating at home?	Yes (n=2) No (n=3)
Have you tried any of these strategies on your child? (Check all that apply)	Small portions and positive reinforcement (n=2) Turning food into play (n=2) "Just one bite" and increasing food amount every day (n=1) Showing them you as a parent eat it too! (n=3) Other (n=1)
What foods/food groups does your child struggle with the most? (Check all that apply)	Vegetables (n=4) Fruits (n=2) Dairy (n=2) Whole grains (n=1) Protein (n=1) Specific food within a food group (n=1)
Would you be interested in participating in an in person program with other parents on strategies to help picky eaters?	Yes (n=2) No Maybe (n=3)
Would you be available to attend a program on May 14th, 11 am-12 pm? If not, please list other dates in May	Yes (n=1)

Table 1 shows combined survey results from the English and Spanish submissions. The survey results indicate that two out of five parents report their child shows signs of picky eating, with vegetables being the most common food group children have difficulty eating (n=4). Other challenging food groups include fruits and dairy (n=2), while whole grains, protein, and specific foods were each mentioned once. Parents have used a range of strategies to address picky eating, with the most common being modeling by eating the same foods (n=3), followed by using 2-3 small portions, turning food into play (n=2), and “just one bite” approaches (n=1). Interest in an in-person seminar is moderate—two parents are interested, and three are unsure. Only one parent confirmed availability for a May 14 session. These findings suggest that picky eating is a shared

concern, especially around vegetables, and that parents are open to learning and trying new strategies. After collecting and analyzing these survey results, a nutrition education seminar was created for parents to attend on strategies to help children who struggle with picky eating.

Project Objectives

Process Objective:

By the end of the seminar, the goal is to have successfully recruited and engaged at least 9 families, each participating in at least one interactive workshop designed to provide practical strategies for managing picky eaters during mealtimes.

Outcome Objective:

By the end of the program, 100% of participants will report an increase in knowledge on strategies for addressing picky eating and identify one new strategy they will try at home with their children.

Data Collection

The seminar, which took place on May 15th at 11:00 am, was a 45-minute session that included opportunities for participants to learn new strategies, have discussions, and ask questions. The seminar was conducted in English, with a Spanish translator present. At the end of the seminar, a survey was given to parents to assess what they learned and what strategies they might attempt at home.

The survey consisted of five questions. Three of the questions were open-ended allowing participants to write additional information, two of the questions asked yes, no, or maybe responses.

Questions:

- 1) What strategies will you take away from this seminar?
- 2) Will you focus on specific foods or overall food groups?
- 3) Do you feel more knowledgeable and confident in helping your child with picky eating behaviors?
- 4) Do you feel this seminar was beneficial and provided useful resources?
- 5) Were there any other strategies or topics you wish had been included in the seminar?

Two sets of questions were created to assess effectiveness of the seminar. The first set of questions (questions one and two) asked the participant about strategies they will take away from the seminar and specific foods/food groups. The second set of questions (questions three, four, and five) asked about the benefits of the seminar and if they felt more confident as a parent after it was complete.

Outcomes, Discussions, and Recommendations

Project Outcomes and Results

The seminar included one parent who fully participated in the session. After the seminar the mother of one child in Head Start answered the survey. Results from the survey are detailed in Tables 2 and 3.

Table 2: *Post- Seminar Survey Results - Application (n=1)*

Question	Response
What strategies will you take away from this program?	“I will be offering veggies to him with shapes and letting him pick out the veggies”
Will you focus on specific foods or overall food groups?	“I will be focusing on veggies”

Table 3: Post-Seminar Survey Results - Key Takeaways (n=1)

Question	Response
Do you feel more knowledgeable and confident in helping your child with picky eating behaviors?	“Yes”
Do you feel this program was beneficial and provided useful resources?	“Yes”
Were there any other strategies or topics you wish had been included in the program?	“No”

For question one, the participant wrote “I will be offering veggies to him with shapes and letting him pick out the veggies.” Question two then asked if they will choose to focus on helping their child with specific foods or overall food groups. The participant chose to focus on the overall food groups stating, “I will focus on veggies”. Question three asked if they felt more knowledgeable and confident after the seminar on helping their child with picky eating. The participant responded “yes”. Question four asked if the seminar was beneficial and provided useful resources. The participants' response was “yes”. The final question was open ended asking the participant if there were any other strategies or topics they would have wished were included in the seminar. The participant responded, “no”.

Project Outcomes and Results Analysis

This seminar indicates promising results in allowing a parent to confidently express feeling more knowledgeable on strategies and implementing them at home during mealtime. The participants showed strong indications that they were able to learn at least two strategies presented in the seminar. The parents also identified that they wanted to focus on a food group instead of a specific food. The parent came into the seminar with the intention to focus on ways to incorporate more vegetables into their child's diet. The parent indicated that they felt more confident and had the knowledge to help their child with picky eating behaviors. It was also

indicated that the seminar was beneficial and provided useful resources to the participant. The participant felt like the seminar covered all her questions and by the end of the seminar which reflected through the final response. Although this seminar only supported one parent, the results show promising indications that have potential to impact other parents struggling with picky eaters. This seminar allowed the topic to be introduced to one parent and assessed using the post seminar survey. Additional seminars on this topic to parents of Head Start may provide useful information that parents can benefit from for their children.

To ensure the seminar was well-suited to the Head Start population, many of whom face food insecurity, the seminar included practical, low-cost strategies for addressing picky eating using affordable and accessible foods. The seminar emphasized flexibility in meal planning, highlighted the use of offered tips for maximizing nutrition with limited resources. By acknowledging these realities, the seminar aimed to be both supportive and realistic for the families it served.

Although not planned in the presentation, nutrition education on diet intervened in the seminar during discussion. The parents had several questions on how to choose nutritious foods and what was considered a balanced meal. The Mediterranean diet was briefly discussed as the parent wanted a foundation of good nutrition.

The pilot seminar faced several challenges with parent involvement, primarily due to working parents' limited availability, lack of transportation, and child-care responsibilities. Jenny, the Registered Dietitian, noted, "Limited availability due to working parents, lack of transportation, child-care" were key barriers to participation. She also suggested that the drop in attendance on the day of the seminar may have been caused by confusion, saying, "One possible factor is that we had a virtual health/nutrition meeting the day before. There could've been

confusion between the two different meetings.” Despite these obstacles, Jenny highlighted several seminar strengths, including “time management of the entire process for project & report as well as the actual training,” and noted that “parents were engaged throughout.” She also credited effective communication strategies such as marketing through email, newsletters, and texts, and constant communication.

For future improvements, Jenny suggested an earlier and more visible promotion: “We could have had printed posters outside of the classrooms/main door/hallway a month in advance.” She also emphasized the value of team collaboration, stating, “Enhanced collaboration with the Family Advocate team to have 1:1 check-in with parents before or after our nutrition class” would have strengthened outreach. Additionally, she recommended working with teachers to “identify any parents who may be interested in participating.” Jenny believes a virtual format might boost attendance, explaining, “It’s easier for them to attend from wherever they are. In addition, we could have extended it to our Head Start seminar in Manassas.” In the future recruitment should be handled with having one on one communication with parents, allowing to target specific families who completed the survey. This approach can help ensure that, through consistent in-person verbal reminders from both the Family Advocate and Registered Dietitian, parents are more likely to commit to attending. Direct communication, especially when built on a strong relationship with the team, may increase the likelihood that parents follow through and participate. This pilot seminar allowed for a better understanding of several factors including requirements, attendance and participation, effective strategies to fix for future seminars.

Implications and Recommendations

The Head Start program has long emphasized the importance of comprehensive nutrition services. A critical component of this mission is engaging families in meaningful conversations

about their child's nutritional well-being and equipping them with practical tools to support healthy eating habits at home. One area where families often need additional support is managing picky eating behaviors, which can significantly impact a child's nutritional intake and overall development. These findings demonstrate how providing the tools through nutrition education can help families feel confident about assisting their children by introducing a variety of food and food groups.

The seminar was advertised in several different manners. An email was sent out to families through their family advocates. Several reminder emails that the seminar was occurring on the specific time and date also followed the first email. A flyer was also sent out to families in both English and Spanish. After limited responses, the registered dietitian and dietetic intern decided to provide an incentive for parents. The incentive was a \$25 Giant gift card that would be awarded raffle-style to parents who attended the seminar. Since only one parent attended, the raffle was not necessary, and she was awarded the gift card.

Due to the low attendance of the seminar, there are several aspects of the seminar that could be altered to increase participation going forward. In the future, the seminar should be offered over Zoom to allow busy parents who may be at work or taking care of other children to join the seminar from any location. This flexibility may target those who cannot be present at the Head Start location during that time. Another recommendation would be to offer the seminar at different times of the day. The seminar was offered before picking their child up from the Head Start location in hopes to attract more parents. However, it may be more beneficial to offer multiple times throughout the day. This will allow parents who are busy before pick-up time to attend the seminar at a time that better fits their schedules.

While picky eating can, in severe cases, contribute to nutritional deficiencies or developmental concerns, in most circumstances it is a typical part of early childhood development. The intervention described in this seminar was originally framed as a tool for preventing malnutrition; however, based on a broader understanding of the issue following the implementation of the workshop, it is now recognized that the more common and immediate impact of picky eating is on parents' emotional wellbeing and the child-caregiver feeding relationship. In the future, this type of intervention is positioned to be a supportive resource aimed at educating and empowering parents, to help them feel more confident and less isolated as they manage mealtimes. This type of intervention is poised to promote a healthier parent-child dynamic around food.

A child's growth and development rely on strong foundational elements of nutrition in terms of deficiencies, social challenges, and environmental stressors which can negatively affect both cognitive function and physical health. This project aimed to provide nutrition education for Head Start parents and caregivers who have challenges with picky eating behaviors from children at home. Through a survey conducted, a specific tailored seminar was created to address difficulties the parents and caregivers of head start faced at home. The seminar was designed to educate parents on specific strategies to promote a positive mealtime environment. The seminar on May 15th was led and completed with a total of one parent participating. The parent was engaged throughout the session and through the post survey showed promising results that they felt more confident and knowledgeable with picky eating strategies. This seminar offers valuable insight into what larger groups of parents and caregivers can benefit from in the future for NVFS Head Start.

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Appendices

Appendix A: English Post-Seminar Survey

Creating Healthy Hearty Eaters: Strategies for Picky Kids Survey

Thank you so much for attending my seminar on picky eating! I truly appreciate your time, engagement, and commitment to supporting your child's healthy development. I kindly ask that you take a few minutes to complete the survey. Your feedback will help us improve future seminars and ensure we're meeting the needs of our families. Thank you again for being such an important part of our shared journey!

1. What strategies will you take away from this seminar

(Please describe any new ideas or techniques you plan to try at home.)

2. Will you focus on specific foods or overall food groups?

(Feel free to share examples or areas you're most concerned about.)

3. Do you feel more knowledgeable and confident in helping your child with picky eating behaviors?

- Yes
- Somewhat
- Not yet

4. Do you feel this program was beneficial and provided useful resources?

- Yes
- Somewhat
- No

5. Were there any other strategies or topics you wish had been included in the program?

(Please share any suggestions or areas you'd like to learn more about.)

Appendix A shows the English post seminar survey given to participants following the seminar. The goal was to have participants spend approximately 5 minutes filling out the survey after completion of the interactive portion.

Appendix B: Spanish Post Seminar Survey

Creando Comedores Saludables: Estrategias para Niños Selectivos Encuesta

¡Muchas gracias por asistir a mi programa sobre la alimentación selectiva! Aprecio mucho su tiempo, participación y compromiso para apoyar el desarrollo saludable de su hijo. Le pido amablemente que dedique unos minutos a completar la encuesta. Su opinión nos ayudará a mejorar los programas futuros y asegurarnos de cubrir las necesidades de nuestras familias. ¡Gracias de nuevo por ser una parte tan importante de nuestro viaje compartido!

1. ¿Qué estrategias llevarás de este programa? (Por favor, describe cualquier nueva idea o técnica que planeas probar en casa.)

2. ¿Te enfocarás en alimentos específicos o en grupos de alimentos en general? (Siéntete libre de compartir ejemplos o áreas que te preocupen más.)

3. ¿Te sientes más informado y seguro para ayudar a tu hijo con comportamientos alimentarios selectivos?

- Sí
- Algo Aún
- No

4. ¿Sientes que este programa fue beneficioso y proporcionó recursos útiles?

- Sí
- Algo Aún
- No

5. ¿Hubo alguna otra estrategia o tema que desearas se hubiera incluido en el programa? (Por favor, comparte cualquier sugerencia o área sobre la que te gustaría aprender más.)

Appendix B shows the Spanish post seminar survey given to participants following the seminar. The goal was to have participants spend approximately 5 minutes filling out the survey after completion of the interactive portion. The 1 parent chose to fill out the English survey, which is why this survey was not used during the seminar.

Appendix C: Seminar Recruitment Flyer (English and Spanish Versions)

The flyer is a two-column layout with a light green background. At the top, there is a decorative border of lime slices. The left column contains the English text, and the right column contains the Spanish text. Both columns feature a central illustration of a bowl of fruit. The bottom of the flyer is decorated with illustrations of various fruits like oranges, lemons, and bell peppers.

Learn Strategies to Help Picky Eaters

Are you struggling with a picky eater at home? Join our free program designed specifically for parents to improve your child's eating habits in a supportive environment.

**Arlington Head Start
Room 309
May 14th 11:00 am - 12:00 pm**

Hosted by Savannah Ludolph
Virginia Tech Dietetic Intern

Aprenda algunas estrategias para ayudar a los quisquillosos con la comida

¿Estás luchando con un comensal quisquilloso en casa? Únase a nuestro programa gratuito diseñado específicamente para aquellos padres que quieren mejorar los hábitos alimenticios de su hijo con un entorno de apoyo.

**Arlington Head Start
Sala 309
Miércoles 14 de mayo 11:00 am - 12:00 pm**

Anfitrión: Savannah Ludolph
Pasante de Dietética de Virginia Tech

Appendix C shows the program recruitment flyer in both Spanish and English. These flyers were sent through email from the Arlington-based family advocate. The flyers were also printed and posted in the Arlington Head Start building approximately 2 weeks prior to the set program date.

Appendix D. Picky Eating Seminar Presentation Slides




CREATING HEALTHY HEARTY EATERS: STRATEGIES FOR PICKY KIDS

Savannah Ledolph
Virginia Tech Extension Program in Nutrition and Dietetics

WELCOME & ICEBREAKER

What food/food group do you want your child to try?



LET'S JUMP INTO STRATEGIES!

EXCITEMENT BEGINS BEFORE THE FIRST BITE

- Let children choose new fruits & vegetables during grocery shopping
- Involving kids in food prep helps them connect positive emotions to new foods

EXCITEMENT BEGINS BEFORE THE FIRST BITE

- Single tasks like washing produce or peeling veggies
- Prepping food together builds anticipation and motivation
- Involving in their role in meal prep helps reinforce positive feelings and food exploration.

START SMALL

- Start:** Start with a tiny portion of a new food at the beginning of the meal
- Avoid:** Avoid overwhelming portions
- Pair:** Pair new foods with familiar or favorite items

START SMALL

Offer the new food 2-3 times a week to

Avoid serving the same rejected food daily

Consistency and patience matter

MAKE IT FUN, MAKE IT THEMED

Incorporate your child's interests into meals

- Use fun shapes to make veggies and new foods more visually appealing
- Create theme meals
- Let the whole family try the new food together
- Build positive peer pressure by showing that siblings and parents enjoy the same food
- Remember the journey starts way from grocery shopping to the dinner table

THE PARENT EFFECT: HOW YOUR APPROACH SHAPES YOUR CHILD'S EATING HABITS

Establishing mealtime routines helps create consistency and security

- Positive reinforcement
- Setting clear boundaries
- Excessive pressure to eat can backfire!
- Consistency & encouragement, not control

COMMON THINGS TO AVOID

- Bribing or punishing around food
- Forcing bites
- Letting mealtimes turn into battles

KEY TAKEAWAYS

- Mindset Shift:**
 - It's not your job to "make" them eat — it's your job to offer food without pressure.
- Practical Tips:**
 - Serve very small "trying bites" of new foods
 - Pair new foods with familiar favorites
 - Repeated exposure
 - Let kids explore food with all 5 senses
 - Keep mealtimes low-pressure and calm

ACTIVITY - BUILD A "TRY IT PLATE":

- 1 safe food their child eats
- 1 new food they might be open to trying
- 1 "parent wish" food - something they hope their child will enjoy someday

ENCOURAGEMENT CIRCLE

- One piece of advice they're going to try this week
- Share one food win they've had recently

HELPFUL RESOURCES

- [Healthy Eating Tips for Kids | The Nutrition Center](#)
- [Picky Eaters | CDC's Works Resources System](#)
- [Picky Eaters and What to Do | Johns Hopkins Medicine | CDC](#)

Q AND A SESSION

Any questions?

SURVEY TIME!



Appendix D are the slides used for the interactive program that took place on May 15th, 12:00 pm. The slides were animated to have bullets appear one at a time so participants could focus on one idea at a time. These slides were the foundation of the program allowing for interactive opportunities such as the “Welcome & Icebreaker”, Build a “Try it Plate” activity, and the “Encouragement Circle”.