Fighting childhood obesity is a primary objective of the Department of Health and Human Services (HHS) under its strategic plan for 2014-2018. HHS seeks “the promotion of healthy behaviors and interventions to reduce childhood obesity” as one of its principal goals. Additionally, the Office of Minority Health’s “Empowered Communities for a Healthier Nation Initiative” awarded over $2.7 million this year to initiatives dedicated to fighting childhood obesity in minority communities.

Compelling data exists regarding a positive correlation between well-child pediatrician visits and interventions, and reduced rates of childhood obesity. Nutrition and insurance programs, including the Supplemental Nutrition Assistance Program (SNAP) and the Children’s Health Insurance Program (CHIP), complement these initiatives and promote healthy behavior among agricultural worker children.

CHIP is a federally funded, block grant program to states. CHIP, first funded in 1997, acts as an insurance bridge for children in families who earn too much to qualify for Medicaid coverage but cannot afford private insurance. CHIP coverage varies from state to state but as a baseline each program covers 100% of well-child visits and dental care. According to the 2014 National Agricultural Workers Survey (NAWS), 82% of agricultural worker children with health insurance receive their health insurance through government programs; it is very likely these insurance programs are Medicaid and CHIP. Recent expansions to these two programs are credited with a reduction of the uninsured Latino child rate to 7.5%, the lowest it’s been in recent years.

In 2018, Congress extended CHIP funding for 10 years as part of two separate short-term government spending bills. CHIP funding had expired on Sept. 30, 2017.

Nutrition programs also have an effect on ensuring that children maintain a healthy diet. SNAP provides a monthly supplement towards the purchase of food and seeds/plants to individuals and families meeting certain resource and eligibility requirements. While it is difficult to determine the exact relationship between SNAP and childhood obesity, SNAP use has been linked to lower childhood nutritional deficiency and higher amounts of essential vitamins in SNAP-receiving children. The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) has been linked to decreases in incidences of childhood obesity, especially among Latino populations. An analysis of the NAWS by researchers from UC Davis reveals that while SNAP participation among agricultural workers increased from 2003 to 2012 (due in large part to eligibility expansions enacted during the recession), Latino agricultural workers used SNAP significantly less than their non-Latino counterparts.

This issue of the Health Policy Bulletin explores efforts at the national and local level to combat childhood obesity among agricultural worker children. FJ will continue to actively monitor federal health and nutrition programs. We will also continue to share successful strategies developed by health centers and Migrant Head Start programs to promote child health and well-being.
Migrant and Seasonal Head Start’s Comprehensive Approach to the Prevention and Reduction of Childhood Overweight and Obesity

By Guadalupe Cuesta, Director, National Migrant and Seasonal Head Start Collaboration Office

In 2009, the Secretary of the U.S. Department of Health and Human Services’ Administration for Children and Families Office of Head Start submitted a report to Congress on the Secretary’s progress in assisting program efforts to prevent and reduce obesity in children who participate in Head Start programs, including progress on implementing initiatives within the Head Start program to prevent and reduce obesity in such children. The report outlined the numerous strategies the Office of Head Start would undertake to address the prevention and reduction of childhood obesity, which is a priority for Head Start.

Migrant and Seasonal Head Start (MSHS), a national program under the Office of Head Start, has embraced and taken advantage of Head Start’s strategies in its own efforts towards the prevention and reduction of childhood overweight and obesity in MSHS children. The 2017 Program Information Report, which collects statistical data from Head Start grantees and their delegates, indicated that 13.97% of MSHS children at enrollment were considered overweight and 19.68% were considered obese according to a Body Mass Index (BMI) chart. In other words, a total of 33.65% of MSHS children were above the range for a healthy BMI.

National Level

MSHS has taken a comprehensive approach to “child health and nutrition, including attainment and maintenance of normal weight gain.” MSHS approaches the prevention and reduction of childhood obesity both at the national and grantee level, utilizing information and resources provided by the Head Start’s Early Childhood Learning and Knowledge Center and the National Training & Technical Assistance Center. It also utilizes its MSHS Training and Technical Assistance (TTA) network, and its National Migrant and Seasonal Head Start Collaboration Office (NMSHSCO) to systemically provide training and technical assistance and collaboration efforts at a national level and across the 38 states where MSHS grantees provide services.

The MSHS TTA network has a dedicated Health Specialist who provides individualized assistance to grantees and delegates. The TTA network provides ongoing training & technical assistance to promote age-appropriate physical activities and help children learn healthy eating habits with programs such as I am Moving I am Learning (IMIL), Trainer of Trainers, and Little Voices for Health Choices (LVHC). Other training offered to grantees includes: Strategies for Obesity Prevention and Management in MSHS Children, Nutrition Education in the Classroom, Integrating Mindfulness into Early Care and Education Program (including

10. http://www.readcube.com/articles/10.1007/s10903-017-0600-x?shared_access_token=PoURcN5olf2QmN03zn26T_e4RwQJchhNybi2wbcMAYV65OsTcXly7ilkk8lrfj2ryXUIC9XlojUNTiveXjIdx5qajj5PNJnYkq5DpXNdV7qQ4_v1WP6lMyMnDMSzXaoPj-9St4f8jX4aMQin20-5Llenqer_M8vrAeMVA%3D

Courtesy National Migrant and Seasonal Head Start Collaboration Office.
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mindful eating), and *Emerging Trends in the Science of Nutrition and its Implications for the Wellbeing of Families*.

NMSHSCO’s most productive and successful collaborations and partnerships related to children’s health has been with the Health Resources and Services Administration (HRSA)’s Bureau of Primary Health Care, community health centers, State and Regional Primary Care Associations, and HRSA’s National Cooperative Agreements (i.e. National Association of Community Health Centers, Farmworker Justice, and MHP Salud); these collaborations ensure access to comprehensive, high quality, culturally-competent preventive and primary health services\(^3\) for MSHS children.

**Grantee level**

At the MSHS grantee level, programs are guided by the Head Start Program Performance Standards to address the prevention and reduction of childhood obesity by integrating developmentally appropriate research-based initiatives that stress the importance of physical activity and healthy, nutritional choices in daily classroom and family routines.\(^4\) MSHS grantees also follow the U.S. Department of Agriculture’s *Child and Adult Care Food Program* (CACFP) guidelines as well as the 2020 *Dietary Guidelines* when providing daily meals to children.

MSHS grantees provide nutrition education materials and curricula guides to each classroom. For example, Community Action Program for Central Arkansas MSHS program utilizes the Wise Curriculum (*We Inspire Smart Eating*) to emphasize and educate children and their families about new and creative ways to incorporate different fruits and vegetables into their daily diet. Parents participate in workshops to learn how to grocery shop on a budget while learning to read labels in order to create more nutritious meals. Many MSHS grantees utilize curricula such as *The Little Voices for Healthy Choices*, *I Am Moving, I Am Learning*, and *Get up and Move!* to reinforce the importance of the mind-body connection and the relationship between physical fitness and early learning, infusing quality physical movement and healthy nutrition choices within their family curriculum approaches and daily classroom routines.\(^5\)

MSHS grantees also engage in collaborations and partnerships in their approach to the prevention and reduction of childhood overweight and obesity. For example, the Central California Migrant Head Start Program collaborates with the University of California Cooperative Extension to provide parent informational sessions related to good nutrition and healthy habits. They also implemented *Re-think Your Drink* with the Madera County Health Department to help families make better choices and reduce consumption of sugary drinks. Tri-Valley Opportunity Council, Inc. Migrant and Seasonal Head Start Programs in Minnesota partnered with the Institute of Agriculture and Trade Policy to implement Farm to Head Start into the centers that provides the children with fresh fruits and vegetables.

**Conclusion**

Providing a comprehensive approach to the delivery of high quality service delivery is a long-standing tradition of Head Start. MSHS embraces that tradition by ensuring that everyone involved in providing services, whether it be at the national level or the grantee level, works together on the prevention and reduction of childhood obesity.

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3. 2015 Memorandum of Understanding Between the Administration for Children and Families Migrant and Seasonal Head Start Program Office of Head Start and the Health Resources and Services Administration Bureau of Primary Health Care
Anticipatory Guidance about Child Diet and Physical Activity for Latino Farmworker Mothers

Authors: T. Arcury, J. Skelton, E. Ip, C. Suerken, G. Trejo, S. Quandt


There is a lack of information regarding healthcare use in farmworker families. Latino farmworker children experience higher than average rates of childhood obesity. Well-child care and anticipatory guidance have been identified as effective strategies for combating childhood obesity.

This study aimed to: 1) describe access to and use of child health care by Latino farmworker mothers; 2) describe what kinds of anticipatory guidance related to child weight the mothers received; and 3) analyze relationships between the receipt of said guidance and its association with personal characteristics of the child (gender, age, and weight status) or mother (age, education, marital status, employment status, years in the U.S., any adult in household with documents, and number of residential moves in the past three months). It also analyzes the characteristics of the usual practice at which the child receives care (type of practice, location, availability of interpreter or appropriate language services) and the child’s pattern of health care utilization (length of relationship with usual practice, date of last visit, and frequency of well-child care).

Participants were women in farmworker families in North Carolina with a child between 2.5 and 3.5 years old. A farmworker family was defined as having at least one adult member employed as a migrant or seasonal farmworker during the previous 12 months. Researchers recruited participants at Migrant Head Start centers, stores, churches, and events catering to the farmworker community. A total of 248 participants -- mother-child pairs -- were recruited from April 2011 through April 2012. Participants completed up to nine interviews at quarterly intervals over two years; during these interviews the children’s height and weight were measured. Interviews were conducted in Spanish at locations chosen by participants. Small cash incentives were provided to mothers at each interview.

Anticipatory guidance measures (defined as age-specific information offered to parents or guardians of young children regarding injury and disease prevention along with healthy lifestyle promotion) were adapted from Shaikh et al and included questions related to home diet and exercise patterns. A variety of analytical models were used to examine associations in data, including chi-square tests, one way analysis of variance, and multilinear regression models.

Researchers found that 30% of children were obese and 20% were overweight, which is similar to other studies of weight in farmworker children, and still higher than U.S.-born children or other Mexican-American children. Researchers found that while overall access to health care appeared to be good for these children, 65% never got well-child care for children or only took their children for care when they were sick. Almost all participants remembered having a provider discuss their children’s weight at the children’s last health care visit. Almost half recalled specific food guidance messages, and almost a third recalled specific physical activity message presented by their health care provider. Many more mothers with obese children remember their provider giving guidance on weight, diet, and physical activity. Those who did not get well-child care for their children or who had been with their provider for a shorter period remembered their provider giving guidance on diet and physical activity.

The study concludes that farmworker mothers do receive anticipatory guidance related to home nutrition and exercise, even in the absence of consistent well-child care, especially if their child is obese. The study
suggests the expansion of anticipatory guidance into more integrated systems of preventive care in a variety of settings, such as clinics, hospitals, and health departments. The study also recommends developing integration strategies with the help of lay health workers to ensure that these anticipatory and preventive guidance measures effectively reach farmworker populations.

**Physical Activity States of Preschool-Aged Latino Children in Farmworker Families: Predictive Factors and Relationship with BMI Percentile**

**Authors:** E. Ip, S. Saldana, G. Trejo, S. Marshall, C. Suerken, W. Lang, T. Arcury, S. Quandt  

Latino farmworker children tend to be more obese and more overweight than the general U.S. population, and more obese than their Latino peers. There are a number of factors that contribute to this increased risk of obesity, including lack of play spaces, frequent relocation, and limited access to nutrition programs and medical care. Other studies indicated that the level of physical activity among Latino children falls well below the Department of Health and Human Services’ recommended guidelines for physical activity. This study aimed to analyze activity states and patterns as they relate to childhood overweight and obesity in children of Latino farmworker families.

This study sampled 250 children from the two-year Niños Sanos study in North Carolina. Participants were mothers who self-identified as Latina, were part of a farmworker family, and had a child between 2.5 and 3.5 years old. Mothers were recruited by a bilingual navigator at a variety of community sites, as well as through door-to-door outreach. Starting at the beginning of the study, data was collected every three months for two years. Children were monitored with accelerometers worn for a week at each of the three-month intervals. At the end of each week-long period, mothers were compensated both for completing each interview and for complying with accelerometer protocol; children were given a small toy. 85% of children completed five days (including a weekend day) of 8 hours of continuous wear. Energy intake, determined by dietary data, was the controlling variable during the study. Trained bilingual staff helped mothers (or caretakers, in the event that the child was enrolled in daycare) determine serving sizes given to their children.

BMI percentiles were calculated using CDC growth charts. Physical activity was calculated by breaking down minutes of sedentary or active data into 15-second segments to better measure bursts of moderate to vigorous, light, or sedentary activity within those larger periods. Physical and social environmental measures were taken based on the mothers’ responses to a series of questions about where they lived and their attitudes about their child’s activity level. Participants were also asked questions to determine if they were seasonal or migrant farmworkers.

Two hundred forty four mother-child pairs completed the study. Children were sedentary for an average of 394.9 minutes a day and engaged in moderate to vigorous physical activity for 9.34 minutes. Twenty point nine percent of children were overweight and 23% were obese. The study sought to characterize and separate children into two activity states: lower activity and higher activity (based on 9 different physical activity variables). Children who were more frequently in the more active state had slightly lower average BMI and weight percentages than those who were in the less active state, but children also frequently switched between physical activity states. The study determined that the impact of social and environmental factors (such as neighborhood safety and availability of playgrounds), as assessed through interviews with the mothers, on the physical activity levels of farmworker children were not significant or were only marginally significant.

The study determined that farmworker children are engaged in very high amounts of sedentary behavior and that moderate to vigorous physical activity levels are much lower than recommended levels. While the authors did not see a significant influence from social and environmental factors on the study’s results, they acknowledged that other studies have seen such impacts, and that more research is needed on the impact of these factors. The study also notes that attitudes in the home about the ill-effects of excessive physical activity and the potential benefits of sedentary activity on learning may affect the amount of activity in which
farmworker children engage. The authors concluded that more research on diet and physical activity is needed to determine the best way forward in reducing obesity in Latino farmworker children.

**Influences on Healthy-Eating Decision Making in Latino Adolescent Children of Migrant and Seasonal Agricultural Workers**

**Authors:** Jill F. Kilanowski, PhD, RN, APRN, CPNP, FAAN  

Latino farmworker adolescents experience higher rates of obesity than their Latino peers and U.S. adolescents in general. Adolescence is also when many youth begin to experience autonomy in their decision making for the first time, exercising various degrees of healthy decision making related to their eating habits.

This study sought to investigate healthy decision making among 12 to 14 year olds enrolled in a federally-funded summer migrant education program in the Midwest. In the past, high rates of overweight and obesity have been found in agricultural worker children and adolescents enrolled in these programs. Past studies of decision making among adolescents in general tended to focus on risk-taking behaviors. Few have focused on Latinos or on healthy eating, despite a high level nationally of overweight or obese Latino children and adolescents. Other studies on overweight/obesity in teens and decision making indicate that cognitive skills must be developed in order to make healthy decisions; additionally, teens must be trained on cost-benefit analysis to better understand the implications of their decisions.

The study was a three-day cross-sectional analysis of 56 students enrolled in the summer migrant education program. These students could read and speak English. On day one, the study was presented and explained to the students who met the inclusion criteria; students were also given informational flyers and parent/student consent forms in English and Spanish. On day two, those with parent signatures on the consent forms turned them in and completed written surveys; 14 female students participated in a focus group. On day three the 10 male students participated in a focus group and all participants were given a gift card as compensation.

The written survey asked demographic questions and questions about family wealth using the four-question Family Affluence Scale (FAS), which asks about the family car, a bedroom of their own, family travel on holiday, and computers at home. In previous studies, the FAS strongly correlated with national economic trends. Participants also completed a series of questions titled “What My Parents are Like” in order to determine what kind of parenting style they experience. The surveys also included several tools designed to measure decision making quality, self-efficacy for healthy eating, social support for unhealthy eating related to family and friends, and ideas about decisions. Finally, focus group questions focused on issues related to health, and friends’ and family’s opinion of eating habits.

From the surveys, researchers learned that 67% of participants were second-generation, and 75% were born in the U.S. Eighty-three percent described their parents as authoritative (listening, warm, placing limits, being fair and consistent). The survey tools also showed that ⅔ of the participants made poor eating decisions. The focus groups identified three major themes: healthy decision making includes produce and physical activity; moms and sometimes coaches exert a strong influence over health and healthy eating; and friends can encourage unhealthy eating.

The study concluded that boys made unhealthy decisions more frequently (70%) than girls (64%), but that agricultural worker adolescents in general make poor quality decisions in regard to healthy eating. The study acknowledges that comparison studies of Latino and non-Latino peers are needed in order to better understand how the decision making habits of agricultural worker children compared to other groups of similarly-aged children.