Celebrando La Salud
(Celebrate Health)
Hispanic Nutrition and Health Initiative

Fall 2007
In the last ten years, the United States has experienced a dramatic increase in the Hispanic population. In 2002, Hispanics became the largest minority group in the country. According to the U.S. Census Bureau, the Hispanic population in the U.S. reached 44.3 million in July, 2006 with 151,289 residing in South Carolina. It is estimated that by 2050 one out of every four Americans will be Hispanic.

**South Carolina**

- From 1990 to 2000, the Latino population in South Carolina increased by 211.2%.
- The 2000-2002 rate of increase placed South Carolina with the fourth fastest rate of increase in Latino populations, behind Georgia, Nevada, and North Carolina.
- A Latino/Hispanic Hub in SC - In 2000 the metro Greenville area was identified as one of the 18 “hyper-growth metro areas” in the Latino population in the United States.

**Health and Nutrition Issues**

- Overweight and obesity in the U.S. occur at higher rates in Hispanic Americans.
- Women and persons of low socioeconomic status within the Hispanic population are particularly affected by overweight and obesity.
- Cultural factors that influence dietary and physical activity behaviors are reported to play a major role in the development of excess weight in Hispanics.
- Diseases such as diabetes, hypertension, cancer and heart disease are found in higher rates among Hispanics compared with non-Hispanic whites.
- Many Hispanics eat more calorie-dense, nutrient-poor foods at the expense of more healthful foods.
- Diets of Hispanics become less healthy as they acculturate to the U.S.
Building the Knowledge Base through Research

This reality is extracting a heavy toll of physical, emotional and financial costs for Hispanic families. It also drains state resources through higher medical expenses and lost productivity. Many of these diseases are preventable through healthy lifestyles that include proper nutrition and physical activity.

However, the association of dietary patterns, obesity, and acculturation, particularly in Hispanics, is poorly understood. Therefore, a team of Clemson University faculty and students is examining this relationship and the nutritional context of the Hispanic population in South Carolina.

Here are some examples of research projects:

1. **The Health and Nutrition of Migrant Farm Workers and their Families**
   
   This exploratory study involved the collection of qualitative data (key informant interviews, direct observations of living conditions, and a review of Migrant Head Start enrollment records) to examine the living conditions, health determinants, and food and nutritional context of migrant farm workers. The qualitative component helped to identify barriers to achieving good nutrition; understand the programmatic, social, cultural, and lifestyle factors to which these barriers can be attributed; and, reveal practices employed to increase food security. In addition, the effectiveness of an educational intervention focusing on nutrition, dental, and fitness for preschool children enrolled in Migrant Head Start was examined.

   
   This study involved qualitative and quantitative methods to examine the relationship of child feeding practices, demographic characteristics, and acculturation to child body mass index (BMI). Individual interviews were conducted with 156 parents of children ages 2-6. In addition, eight focus group interviews were conducted in five counties in different regions of South Carolina.
Attitudes, Beliefs, Barriers, and Motivators toward Food Choices and Healthy Eating among Hispanic Adults

This examination includes collecting data on food choices, dietary patterns, dietary acculturation, health status, food security, and the prevalence of overweight and obesity. Data collection included seven focus group interviews and more than 300 individual interviews (including 24 recalls of food intake) that were conducted in four regions of South Carolina - Upstate, Midlands, Pee Dee and the Low Country. Results showed that 72.8% of Hispanics were either overweight or obese. Only 37% of this population reported being physically active. The findings from this study are being used to develop an educational intervention that is culturally compatible and appropriate for the Hispanic population. The educational curriculum is in the draft phase, and will be pilot tested in spring 2008. This extensive project will not only help fill numerous gaps in the literature related to the food and nutrition context of Hispanic adults, but it will also result in a culturally compatible, tested educational intervention that can be utilized by nutrition educators, especially those in Cooperative Extension and EFNEP.

Development of a Nutrition Education Program for Hispanic Women Based on a Cookbook and Cooking Classes Using the Health Belief Model and the Social Cognitive Theory

One strategy that can help people to acquire healthy eating habits is teaching them to prepare healthier meals and snacks. This research project will enable a better understanding of the beliefs and self-efficacy that Hispanic women of South Carolina have regarding eating and cooking healthful foods. The first phase of this study involves the assessment of the foods people have in their pantries, shopping habits and the recipes that are used the most at home. After this data is analyzed and interpreted, a nutrition education program will be developed and pilot tested. The recipes provided by participants will be modified and sensory testing will be conducted.

Jump into Food and Fitness Program for Hispanic Youth

Jump into Food and Fitness, a nutrition and physical activity program was tested with Hispanic youth. The specific aims for the pilot project were to assess the impact of the intervention on nutrition and physical activity knowledge, practices and behaviors of Hispanic youth 8-11 years old, and to assess the impact of the educational program on the parents of those youth. The educational program was implemented in Oconee, Anderson and Orangeburg Counties. Partnerships were formed with 4-H agents in Anderson and Orangeburg Counties and with the James M. Brown Elementary School in Walhalla.
Partnerships
Partnerships between the private, public, community, and voluntary sectors are a key component of the initiative. Partnerships and collaborative relationships are important for leveraging resources, building power, strengthening the development and implementation process, and achieving meaningful change. A partnership with the Universidad Autonoma de Yucatan, in Merida Mexico, has been initiated. Through this partnership, we have established an exchange student program that began fall semester, 2007. A graduate student in Food Science at the University of the Yucatan came to Clemson to complete a 3 month research project. Using a comprehensive, theory-based model, the student worked with the students and faculty in the Department of Food Science and Human Nutrition to develop educational materials for the Hispanic population.

Some of the other partnerships formed by this group include:

- The Latin American Council of South Carolina
- Clemson University Joseph F. Sullivan Center
- Clemson University Center for Reducing Health Disparities
- SHARE Head Start
- Migrant Education and Migrant Head Start
- The Mexican Consulate at Raleigh, NC
- Lifelong Learning, Education & Training for Adults
- Churches and faith-based organizations throughout the state
- Anderson Hospital
- After school programs such as YMCA and Boys and Girls Clubs
- Golden Strip Learning Center
- Cooperative Extension
- University of South Carolina Consortium for Latino Immigration Studies
Providing Critical Education and Outreach

Media

The group has done extensive outreach and education through the media, such as newspaper articles and columns, radio and television. The articles appear in free Spanish newspapers such as Vida Latina and NotiMix, Latino, La Isla (Hilton Head, SC), and La Opinion Hispana (Upstate). The newspapers where the columns appeared are distributed free of charge at Hispanic-oriented businesses, libraries, entertainment facilities and large retail chains via racks and stand-alone bundles. (Weekly, Biweekly, Monthly). The group has done more than 25 30-minute radio shows on Spanish-speaking stations throughout the state. Members of the group have appeared in television segments for Clemson University’s At Home, Southern Style television program for S.C. Educational Television and the Lucy’s Tasty Treasures program for elementary school age children.

Health Fairs and Presentations

The group has participated in several health fairs conducted in Hilton Head, Bluffton, Greenville, and Easley. Numerous presentations to community and parent groups and organizations, as well as presentations at national and international conferences have been conducted. Some examples: South Carolina Association of Extension 4-H Agents and FCS Annual Meeting where a session entitled “Practical Tips for Developing Programs for Hispanic Audiences” was presented, and weeklong workshops on program development and implementation at several universities in Mexico.

Educational Programs through Cooperative Extension

The information obtained from this research is being directly applied in the educational programs delivered throughout the state. The Expanded Food and Nutrition Education Program (EFNEP) will be expanded to provide research-based, culturally appropriate information to the Hispanic population. EFNEP has helped children, youth and families develop the knowledge, skills, attitudes, and behavior needed to improve their diet for more than 38 years. The educational curriculum and materials developed and tested by this group will be utilized by EFNEP educators to reach Hispanic audiences in the future.

The information obtained and educational materials developed by our group are helping to catalyze needed progress in improving the health and nutrition of the Hispanic population in South Carolina.
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A Clemson University Hispanic Nutrition and Health Initiative