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# Diet and Nutritional Concerns of Hispanic Americans

by

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Thesis submitted in partial fulfillment
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of

DEPARTMENT HONORS

in

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# Diet and Nutritional Concerns of Hispanic Americans

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Abstract:

Hispanic Americans are the second largest ethnic minority group in the United States today, at 12.5% of the total U.S. population. They face considerable nutrition-related challenges, of which dietitians and other nutrition professionals who serve this population need to be aware. Their diet goes through drastic, rapid changes soon after immigration to the United States, many of which have a strong negative impact on their health, putting them at greater risk for obesity and chronic diseases than the general population. In addition to diet and disease, Hispanic Americans face other issues that hinder their ability to benefit from nutritional counseling, such as lack of food safety knowledge, language barriers, and attachment to traditional alternative remedies. Community based, culturally tailored interventions are producing impressive results in helping Hispanics achieve improved nutritional status. The goal of this paper is to present a general overview of the basic issues that are presented in the last five years of research on Hispanics and nutrition.

## INTRODUCTION

As the second largest ethnic minority group in the United States today, Hispanic Americans face considerable nutrition related challenges, of which dietitians and other nutrition professionals who serve this population need to be aware. As they are acculturated in the United States, their diet goes through rapid changes. Many of these changes have a negative impact on their health, putting them at greater risk for obesity and chronic diseases than the general population. There are many factors that complicate these nutritional issues for American Latinos, beyond economics and food choices.

## STATISTICS

According to the U.S. Census Bureau, Hispanic or Latino Americans accounted for 12.5% of the total U.S. population in 2000 (1). Hispanics are the second largest minority group in the United States, passed only marginally by Black or African Americans, who make up 12.9% of the U.S. population. The terms Hispanic and Latino are equivalent and used interchangeably by the U.S. Census Bureau, as they will be in this paper.

Hispanic Americans differ from the non-Hispanic American population in several ways. Generally speaking, they are younger, poorer, less educated, and live in larger households. The mean age of Hispanic Americans is 26 years, compared to a mean age of 37 years for non-Hispanics (1). Their average household size is 4, compared to 3 for non-Hispanics, and 70% of them speak a language other than English in their homes (1). Among non-Hispanics, 91% speak English in their homes (1).

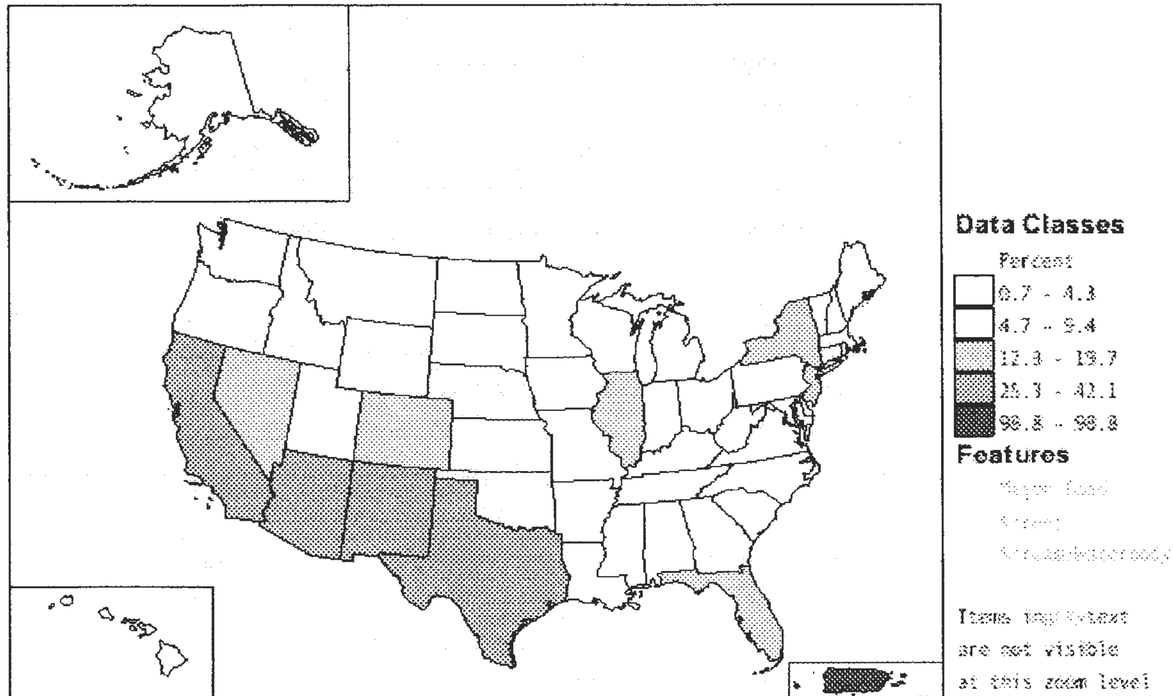
Some of the most striking differences between the Hispanic and non-Hispanic populations are in education and income levels. Among Hispanics 25 years and over, only 52% have achieved an education level of high school or higher; among non-Hispanics, 84% achieve

this educational level (1). The median household income in 1999 for Hispanics was $33,676; their per capita income was $12,111 (1). Non-Hispanics earned a per capita income of $22,943 and a median household income of $42,909 (1). In this population twenty-two percent of individuals were below poverty level, which is twice the percentage of non-Hispanics at 11% (1). Non-Hispanics owned 68% of the housing units that they lived in, while Hispanics only owned 46% of their housing units (1).

Contrary to what much of the general public assumes, Hispanics are not a homogenous population. Many Americans consider the terms Hispanic/Latino and Mexican American to be equivalent. In actuality, Mexican Americans only make up 58.5% of the Hispanic population (1). The other 41.5% come from other countries, such as Puerto Rico: 9.6%, Cuba: 3.5%, the Dominican Republic: 2.2%, and the various countries in Central America (excluding Mexico) and South America (1). The Hispanic classification, according the U.S. Census, also includes individuals whose country of origin is Spain; they make up a very small percentage of Hispanic Americans (1).

Hispanic Americans are not evenly spread geographically throughout the United States, although they are more widely dispersed than many might expect. Figure 1 is a map of the population distribution of Hispanics of any race in the United States by state, provided by the U.S. Census Bureau (1). The states with the largest percentage of Hispanics in their populations are concentrated in the Southwest: California: 32.4% of the total population, Arizona: 25.3%, New Mexico: 42.1%, and Texas: 32% (1). These states are closely followed by Nevada, Colorado, Illinois, Florida, New Jersey, and New York (1).

**<u>Figure 1. Percent of Persons who are Hispanic (of any race): 2000</u>**




ACCULTURATION

Since the Hispanic population is so diverse, it is difficult to define the diet they consumed before coming to the United States; depending on their country of origin, their traditional diet varies greatly. However, researchers have concluded that in general, the traditional diet of many Hispanics is based on grains and beans, includes many complex carbohydrates and vegetables, and is fairly healthy (2,3). As they move to the United States, their lives undergo dramatic changes, many of which have strong impacts on food choices. Many of the changes in food choices, although not all, have a detrimental effect on their health.

Dietary patterns change rapidly from native-born family members to the second generation that is born in the United States (3, 4). Lower incomes have been found to be associated with less healthful diets among non-Hispanics, but more healthful diets among first-generation Mexican Americans (3). However, by the second generation, the diet of Mexican women has deteriorated greatly and is approximately the same as White non-Hispanic women

(3). Data from the third National Health and Nutrition Examination Survey, NHANES III, revealed that Mexican-born women had the healthiest cardiovascular profiles, according to levels of blood pressure, body mass index, and prevalence of smoking (4). U.S.-born Hispanic men and women had the least healthy profiles (4).

Some parts of the traditional diets are maintained as acculturation occurs among Hispanics and other parts of the diets change. Elements of the diet that remain relatively stable are eggs and carbohydrate staples such as rice and potatoes (2). Elements of the diet that change are an increase in "American" foods, such as hamburgers, pizza and animal-based foods, such as meat, whole milk, and cheese (2, 4). Their intake of high fat snacks and sweets increases as intake of fruits and vegetables decreases (4). Mexican-Americans in several areas of the United States have been found to consume high fat diets (4).

Food cost and availability of traditional items influence Hispanic American food choices, but they may not be the biggest influences. In "Dietary Acculturation of Hispanic Immigrants in Mississippi" by Gray et al; it was found that the influences of work and time were by far the strongest (2). Interviews and focus groups with the subjects in the study also revealed perceptions about food culture in the U.S. that may influence the altered choices of many immigrants (2). Here are some quotes from the interviewees, Hispanic women in Scott County, Mississippi:

> "Food is artificial here. Fruits in the U.S. do not have flavor or aroma. Milk and butter here are not milk and butter" (4).
>
> "In Mexico, (women) did not have to work, but here you have to work. Because of this, sometimes you have to buy easy things to give to the children. You arrive from work tired. In Mexico, you attended to your kids more. Here there is not time" (4).
>
> "Here it is expensive to eat healthy; the cheap foods make a person fat" (4).

> "Kids aren't eating their school lunches, and I think it is because snacks are sold. If they were eliminated, kids would eat the food" (4).
>
> "My children are more accustomed to eating healthy things more than the children here. I try to prepare something healthy at night because my kids eat poorly at school. Yes, my kids prefer "chatarra" (trash), but at home I can control it: I don't let them eat it" (4).

The quotes above highlight another concern of Hispanic Americans: the diet of their children. The mothers express concern about the unhealthy foods that their children have easy access to in American schools. The American "junk" foods are identified as part of the culture of the United States, and thus have increased status and desirability for many immigrants, especially children (4). The preferences that their children develop while in school in turn influence the food choices of their family.

Although it has been found that the diet changes rapidly between the first and second generations, the existing body of research suggests that generation alone is not enough to determine health status (4). Stronger predictors of health are English-speaking ability and income (4). Although Hispanics arrive to the U.S. with a strong work ethic, there are many barriers to their ability to improve their economic status. The barriers affect their nutritional status as well. They generally have low-paying jobs with little worker protection and availability of health insurance (4). Their long work hours decrease their access to possible benefits from services that have been designed to assist them with food and nutrition (4). The long work hours also, as mentioned by the Hispanic women above, leave them much less time to prepare healthy foods at home.

As Hispanics become more acculturated and their diet increases in high fat and high carbohydrate foods, and they often become more sedentary (2). The dietary and activity changes are usually accompanied by an increased risk of the chronic diseases that plague other

Americans. Some of the conditions are even greater concerns specifically for the Hispanic population, as the risk for Latinos of developing the conditions has been established by research to be greater than the risk to the general U.S. population. It is beyond the scope of this paper to discuss all of the conditions; I will focus on the two that are currently the most prevalent: obesity, and diabetes.

OBESITY

Normal weight, overweight and obesity are generally defined in current research in terms of the Body Mass Index, BMI. Overweight is a BMI of 25-29, and obesity is a BMI of 30 or above. Extreme obesity is a BMI over 40. For children over 2 years of age, weight is classified according to the Center for Disease Control (CDC) growth charts on BMI. Overweight is a BMI greater than the 95th percentile; at risk for overweight is a BMI between the 85th and 95th percentiles.

Of all the ethnic groups living in the United States, Hispanics have been found to have one of the greatest risks of becoming obese, due to the dietary changes that occur during acculturation. The second generation of immigrants are more than twice as likely to be obese than first generation immigrants to the U.S. (4). Between 1999 and 2002, among the population of Mexican American adults over 20 years of age, 72.5% had a BMI greater than 25; 32.6% had a BMI greater than 30 (5). The figures are roughly the same for both men and women in the overweight category, 73.1% for men and 71.7% for women, but in the obese category, women fare much worse: 38.4% of women were obese, compared to 27.3% of men (5). For both men and women, the age group that was most likely to be overweight was 40-59 years- in both sexes; over 80% of individuals' BMI was 25 or more (5).

For children, the numbers are equally worrisome. Among all low-income children, the prevalence of overweight is highest among Latino children (6). The current body of research has not established exactly why this is the case; low socioeconomic and education levels have been linked to obesity, but in minority groups, some have found that cultural, dietary, and physical activity factors play more prominent roles (6). For Mexican-American children, the following prevalence of overweight or at risk for overweight, defined as BMI greater than 85th percentile, has been reported for both sexes combined: 2-5 years of age, 26.3%; 6-11 years of age, 38.9%; 12-19 years of age, 40.7% (5).

In an interview-based study with workers at a community center that served primarily low-income Hispanic families and their children, the results showed several themes regarding barriers to controlling obesity for Hispanic Americans (6). The subjects identified overeating and fast food as major contributors to obesity in this population (6). They stated that fast food was preferable than other foods, easily available, socially influenced, and a time-saver (5). Cultural foods that were high in fat and starches were also blamed, with reference to their frequent consumption as a family activity (6). Low accessibility to fresh vegetables and healthy foods in low income communities was cited, as was the issue of safe locations for exercise (6). Above all of the reasons, though, the most frequently mentioned barrier to the control of obesity among low-income Hispanics was lack of time (6).

The interviewees in the above-mentioned study did not feel that lack of knowledge about healthy eating and practices was a problem (6). Many health-related interventions in the United States focus primarily on education. Education alone may not be the most effective means to encourage behavior changes, however, especially for the Hispanic population. Data from the 1994-1996 Continuing Survey of Intake by Individuals revealed that in comparing Hispanic un-

acculturated Spanish speakers with acculturated Hispanic English speakers, Spanish speakers had less knowledge about the nutrient content of foods and diet-disease relationships (3). Spanish speakers also placed greater emphasis on the importance of a healthy diet, and scored higher on the Healthy Eating Index (3). The English-speaking Hispanics, who had a higher degree of acculturation which included greater knowledge about nutrition and disease, placed less emphasis on a healthy diet, and their Healthy Eating Index scores were lower (3).

Obesity is a risk factor for many chronic health conditions, including hypertension, high cholesterol, stroke, heart disease, some kinds of cancer, and arthritis. Of all of these, the one most closely linked to obesity, and of special concern to Hispanic Americans, is diabetes.

DIABETES

Diabetes is the most prevalent health problem among minorities in America, and Latinos have two to three times the risk of acquiring it as Caucasians (7). The incidence of kidney disease is 4 to 6 times higher in Mexican Americans than in Whites, and peripheral vascular disease is 80% more common in Mexican Americans than it is in Whites with diabetes (8). While the higher rates of diabetes are linked to the higher rates of obesity among Hispanic Americans, there is also evidence that a genetic component exists, similar to the "thrifty gene" that has been described among Native Americans from the Southwestern United States (3). Lack of access to medical care and coverage, educational, cultural, and transportation barriers all contribute to higher risk for diabetes-related complications among Hispanics (7).

An area that shows considerable promise among efforts to address the high incidence of diabetes and complications among Hispanics is the emergence of culturally appropriate, community health worker-led interventions (8). The CDC has developed an initiative called Racial and Ethnic Approaches to Community Health that is aimed at eliminating racial and

ethnic disparities in nine priority areas, including diabetes (9). The initiative funds community based interventions, such as one focused on diabetes-related outcomes among African Americans and Latinos in Detroit (8). The program, and others like it, develop and implement interventions that are culturally tailored and administered through trained community health workers; such programs have been found to be effective, require a low level of technology, and are cost effective (7,8). Interventions such as these have demonstrated significant positive effects with diabetic Hispanics, including increased knowledge, improved dietary and other behaviors, and improved biochemical markers such as blood glucose and hemoglobin A1C (7, 8).

## OTHER NUTRITION RELATED CONCERNS

In addition to diet and chronic disease issues, other related factors are highlighted in the current body of research on Hispanic Americans. Nutrition professionals working with this population should be aware of these issues. The following section will briefly describe several factors that are related to the previously described diet-disease relationships.

### Food safety

*Queso fresco* is a Latin American soft cheese that is traditionally made with raw milk and is popular among Hispanic Americans (10, 11). It is usually not produced commercially or with pasteurized milk; street vendors and family or friends are the most common distributors (10, 11). Several major outbreaks of food borne illness from *Salmonella* and *Listeria* among Hispanic Americans have been traced to this food item, and even resulted in the sale of raw milk becoming illegal in some areas (11). A multi-agency, community based intervention in Washington State was organized in response to a *Salmonella* outbreak from *queso fresco* (10). It was entitled "The Abuela Project," as the education was implemented by older Hispanic women, or *abuelas*. The intervention demonstrated significant success in increasing knowledge of food

safety among the population, as well as taught them how to make *queso fresco* at home with pasteurized milk (10). The incidence of reported illnesses from *queso fresco* dropped rapidly after the project (10).

Traditional alternative medicine

Hispanics, especially the elderly, are likely to try alternative or complementary medicine for their illnesses (12). Health beliefs and folk practices are parts of their traditional culture that they are likely to adhere to even after their language and diet changes (12). Modalities they are likely to use are dietary supplements, home remedies, and *curanderos*, traditional folk healers or shamans (12). Most of them do not inform their physicians about these therapies, although most do consult their physician about the same health concerns for which they use the therapies (12). They most often rely on family and friends when choosing what alternative remedy to use (12). Nutrition professionals need to carefully screen clients for the use of such remedies, as they can have significant impact on nutritional and health status.

Perception of racism in health care

Many ethnic minorities perceive that there is racism in the American health care system, and prefer to have physicians that are of the same ethnicity (13). Among Latinos, approximately one third are found to have this preference, which is higher than African Americans (one fourth) (13). Although not all Latinos have this preference, those that do may have difficulty forming therapeutic relationships with health care workers that are of another ethnicity, and may rate Latino health professionals with greater satisfaction (13). Since increasing access to Latino nutritional workers is not always possible, nutrition professionals need to develop skills in cultural competency and elimination of discrimination (13).

Errors in medical interpretation

Many nutrition professionals who work with Spanish-speaking clients are not fluent in Spanish. Professional interpreters are often used; however, even though many have initial screening, mechanisms are often not in place for continued training and performance evaluation (13). Often, ad hoc interpreters are used who have received no formal medical interpreter training or screening, such as nurses, social workers, or family members (13). Nutrition professionals who are not fluent in Spanish should be aware that errors in medical interpretation are extremely common; a recent study found that errors averaged 31 per clinical encounter, with 63% having potential clinical consequences, and that errors by ad hoc interpreters were more likely to have clinical consequences (13).

## CONCLUSION

Hispanic Americans face considerable challenges regarding diet and health as they become acculturated in the United States. The factors involved in the challenges are numerous, diverse, and often still not well defined. Many of them come to the U.S. with good diets and health, and little knowledge of nutrition and disease. As Hispanic immigrants become acculturated, their knowledge of diet and health increases, even as their diets and health deteriorate. Although education is part of the answer, knowledge alone is not enough to bring about significant behavior changes in this population.

The issue of lack of time that shows up in many studies on the Hispanic American population needs greater definition, so that interventions can be planned that are more effective and culturally appropriate. This issue is often simply dismissed by researchers as poor time management by the population in question; however, this does nothing to help resolve the problem (6). It is likely that the demands placed on these individuals are so great that they indeed do have very little time to set aside for increased exercise, healthy eating, and other

healthy lifestyle factors. Intervention measures are needed that enhance or expand upon education to help the Latino population overcome the barrier of time as well as the other barriers that have been discussed. Current research is showing that community based, culturally tailored interventions are having the most significant impacts in helping Hispanic Americans achieve better nutritional status and health.

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