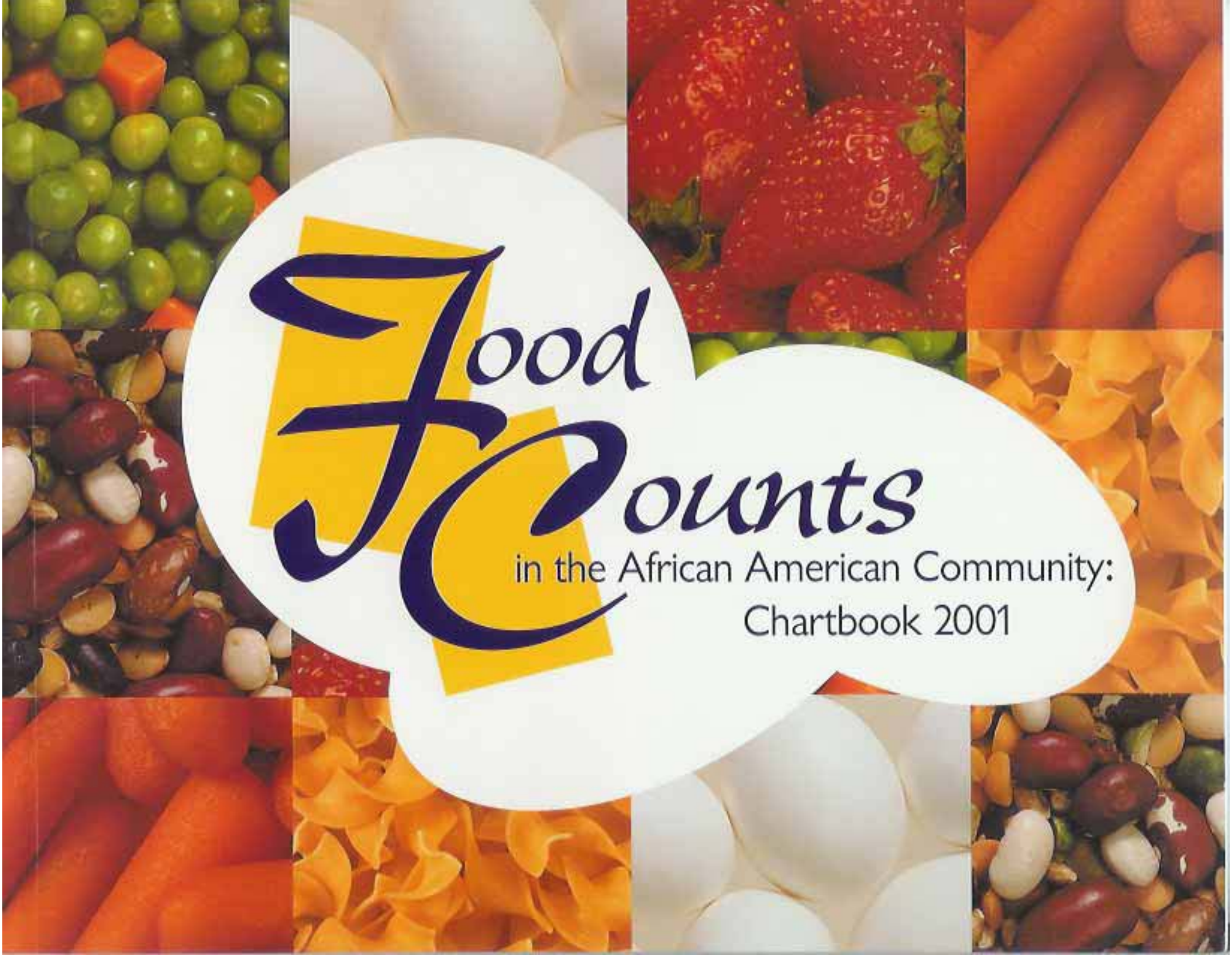
Food Counts
in the African American Community:
Chartbook 2001

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Food Counts

in the African American Community: Chartbook 2001

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Morgan State University, Public Health Program

April 2001

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Now we're . . . on the year 2001 and we don't have any more excuses not to eat right. Black folks need to get serious about their diets and we can do that and have fun with it, too.

– Johnny Rivers
Chef, Disney World

OVERVIEW

Food Counts in the African American Community is composed of a chartbook and detailed tables. This information is compiled for a diverse audience – the public, community groups, universities, the private sector and government. The chartbook highlights food and nutrition information and facts about the way we eat displayed in charts and graphs. Specific data for these charts and graphs were drawn from 31 tables in the Appendix.

MAKING NUTRITION A QUALITY OF LIFE ISSUE IN THE AFRICAN AMERICAN COMMUNITY

As we enter the 21st century, more than 35 million African Americans live in the United States. We represent almost 13 percent of the United States population. More than 50 percent live in the South, about 17 percent live in the Northeast, 19 percent in the Midwest and 8 percent in the West. Although a disproportionate number of African Americans remain poor, about 70 percent live above poverty. There is a sizeable and growing middle and upper income group. Higher economic status should mean better nutrition and health. For many African Americans, our data show this is not true. For many of us, our diet and lifestyle practices do not improve with higher economic status. Consequently, many of the leading causes of death for African Americans are chronic diseases that, in turn, are linked to quality of life, diet and physical activity. This is the major impetus for creating *Food Counts in the African American Community* and we have focused this chartbook on five important areas:

1) dietary guidance
2) nutrition and the lifecycle
3) diet and disease relationship
4) physical activity and
5) foods we eat

35 million African Americans in the U.S. population

Today, more than 35 million African Americans make up 13% of the U. S. population. More than 50% live in the South, 17% in the Northeast, 19% in the Midwest and 8% in the West

A Community Picture

Defining Community

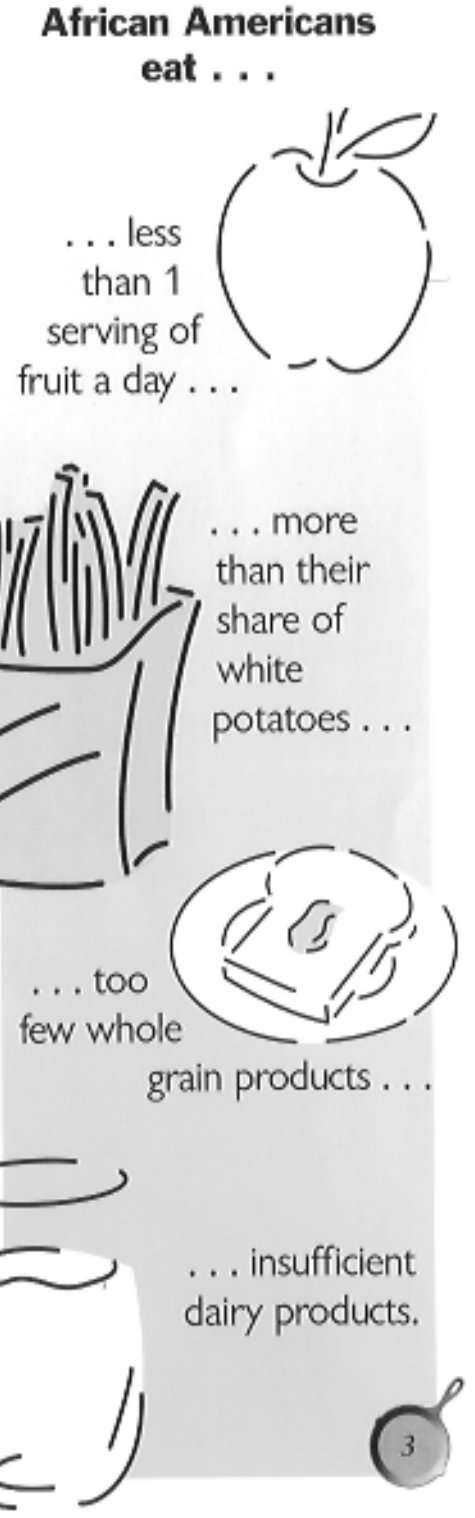
We want to present a community picture of food, nutrition, and lifestyle practices among African Americans. This picture will show what we eat; how much we eat; what we know and think about nutrition; how often we exercise and where we get our food. Better nutrition and healthy living requires an understanding of factors that influence what we eat. The African American community is not the same throughout. What we eat must be viewed in the context of our diverse sociocultural and economic environments. Our definition of community also can depend on whether we identify ourselves through family, city or town, church, organization, school or neighborhood. These group identities may contribute to how we sustain ourselves and impact general health and well being.

Food Counts in the African American Community follows the Food Guide Pyramid and presents a picture of the foods we eat in groups: grains, fruits, vegetables, dairy, and meat. Each food group is examined through the lens of our community based on gender, age, income, food stamp usage, education, region, degree of urbanization, body mass index, and nutrition knowledge, attitudes and behavior. Using this model we had some interesting findings.

In the African American community, higher income and education do not necessarily lead to good nutrition practices. African Americans need to eat more whole grain foods. Most African Americans consume less than one serving of fruit a day. Higher income and more educated African Americans meet the recommendation for vegetable consumption, but do so by eating more than their fair share of white potatoes. Conversely, we consume less than the recommended servings of dairy products and place ourselves at greater risk for low intakes of calcium and related health problems.

In the African American community, higher income and education do not necessarily lead to good nutrition practices.

To capture this community picture of food, nutrition, and diet practices among African Americans, we used a national survey representative of the United States population. *Food Counts in the African American Community* used data from the Continuing Survey of Food Intakes by



ing, research, policy, business and employment.

More informal food systems also exist in the United States and consist of community gardens, fishing, hunting, social functions and emergency food. However, persistent problems with poverty, hunger and food insecurity have caused emergency food to evolve into a more formal non-profit system. For example, America's Second Harvest, the largest domestic hunger relief organization in the United States, distributed 1 billion pounds of food to people in all 50 states and Puerto Rico in one year. Nutrition assistance programs also can be considered part of the public, non-profit food system. For eligible low income families, these programs are sources of food in the form of food stamps; school lunches; school breakfasts; supplemental food for women, infants, and children; child and adult daycare food; elderly congregate meals and temporary emergency food assistance.

People often think that the viability or investment in a community is only linked to increased economic development. We believe that food, nutrition and health issues are just as important because everyone needs food to survive, and a healthy, well-nourished body is critical to mental and physical performance. Additionally, for the African American community, a greater understanding is needed of the fact that food and nutrition are very much linked to community food security, health and increased quality of life. In turn, economic development can come from investments made by or within a healthy, productive community.

Both formal and informal food sources make up a community's total food system. A community is food secure when nutritious foods are accessible, safe, and affordable for all.

How A Food System Defines A Community

In many ways, the United States food system defines the African American community and determines its food security:

• *Through nutrition assistance programs, a community school feeds children school breakfasts, lunches and after school snacks.*

Where do you and your family obtain nutritious foods in your community?

- Restaurants
- Food assistance
- Grocers
- Gardens
- Private sources
- Farmers markets

Food and nutrition are linked closely to food security, health and increased quality of life.

In 1996, 39% of African American school children were certified for free lunch and 24% for reduced price lunch.

There are less than 18,000 African American farmers in the U.S. today, compared to 1 million in 1920.

More than 50,000 churches and other charitable organizations distributed food received from America's Second Harvest network of food banks in one year.

Due to persistent low income levels, African American children are disproportionately represented as certified to participate in the National School Lunch Program. In 1996, over 38 million children participated in the Lunch Program. While African Americans account for only 13% of the U. S. population, 63% of African American children are certified for the Lunch Program with 39% certified for free lunch and 24% for reduced price lunch.

• *A local farmer participates in an urban farmers market to provide fresh produce to a central city neighborhood.* Nationwide, almost 3,000 farmers' markets exist. However, today there are less than 18,000 African American farmers in the United States compared to 1 million in 1920.

• *A large grocery store opens where none existed in a rural town.* There are 126,000 grocery stores and 30,700 supermarkets ($2 million or more in annual sales) in the United States. Where people live determines not only the number and size of stores they have access to, but the price, quality and variety of foods sold at those stores.

• *A community church sponsors a soup kitchen or food pantry to meet family emergency needs.* Over 50,000 charitable organizations receive food through the America's Second Harvest network, a national network of 190 food banks.

Determining A Community's Food Security

Access to safe, affordable, nutritionally adequate, quality food available for all in socially acceptable ways determines a community's food security. In many instances, this means having the ability to purchase food through various retail sources. In other instances, it means acquiring food through various private sources. And in some instances, for families with limited resources, it means participating in nutrition assistance programs. Whichever way you frame community food security, these factors must exist for healthy eating choices and practices to take place.

ing, research, policy, business and employment.

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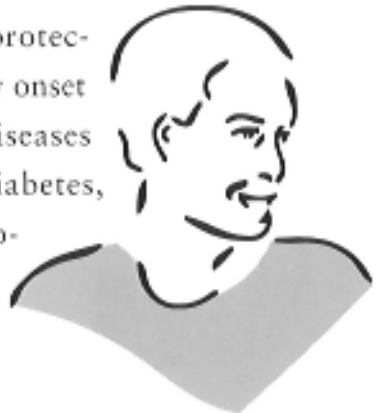
- Food assistance
- Grocers
- Gardens
- Private sources
- Farmers markets

Linking Diet and Health Throughout the Lifecycle

This chartbook presents basic information on the relationship between diet and health. Good nutrition is so important to health status throughout the lifecycle that we begin to emphasize nutrition even before women become pregnant, during what is called the "preconception period." We start to counsel women about diet before they become pregnant so that the growing fetus can get the best start in life. From the fetal stage onward, nutrition plays a role in whether children have appropriate growth and development, how well their bones and teeth are formed, how well their brain is formed, and whether there is adequate protection against the early onset of such chronic diseases as hypertension, diabetes, heart disease, osteoporosis, and some forms of cancer.



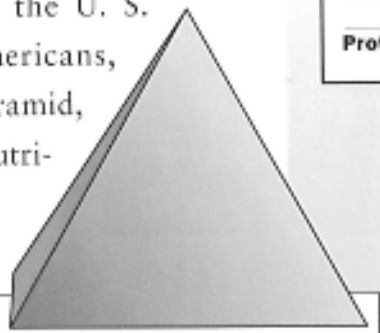
Dietary Guidance

Food Counts in the African American Community asks the question: How can we know if we are eating right? While there is not a simple answer to this question, there is science-based dietary guidance to help the American public follow healthy eating practices. This book will highlight three approaches used to communicate healthy eating messages to the public: 1) the U. S. Dietary Guidelines for Americans, 2) the USDA Food Guide Pyramid, and 3) Nutrition Facts on nutrition labels.

Nutrition Facts

Serv. Size 2.5 oz. (70g/about 1/3 box) (Makes about 1 cup)
Servings Per Container about 3

Amount Per Serving	In Box	Prep*
Calories	260	410
Calories from Fat	25	170
	%Daily Value***	
Total Fat 2.5g	4%	28%
Saturated Fat 1g	5%	23%
Cholesterol 10mg	3%	3%
Sodium 560g	23%	31%
Total Carbohydrate 47g	16%	16%
Dietary Fiber 1g	4%	4%
Sugars 7g		
Protein 11g		



DIETARY GUIDELINES 2000

- Let the Pyramid guide your food choices.
- Choose a variety of grain daily, especially whole grains.
- Choose a variety of fruits and vegetables daily.
- Choose a diet that is low in saturated fat and cholesterol and moderate in total fat.
- Choose beverages and foods to moderate your intake of sugars.
- Choose and prepare foods with less salt.
- If you drink alcoholic beverages, do so in moderation.
- Be physically active each day.
- Aim for a healthy weight.
- Keep food safe to eat.

U. S. Dietary Guidelines, the Food Guide Pyramid and nutrition labels found on food packaging are tools you can use to help you and your family develop healthy eating practices throughout your lives.

Physical Activity Throughout The Lifecycle

While there is a lot of scientific evidence linking moderate-intensity physical activity with improved health outcomes, most Americans do not engage in an adequate amount of physical activity on a daily basis. Given this dichotomy, the Surgeon General has put forth guidelines to help focus our attention on the need to increase our energy expenditure. In the chapter on physical activity, we will present these recommendations as well as the benefits of exercise and some tips on how to incorporate physical activity into our everyday lives.

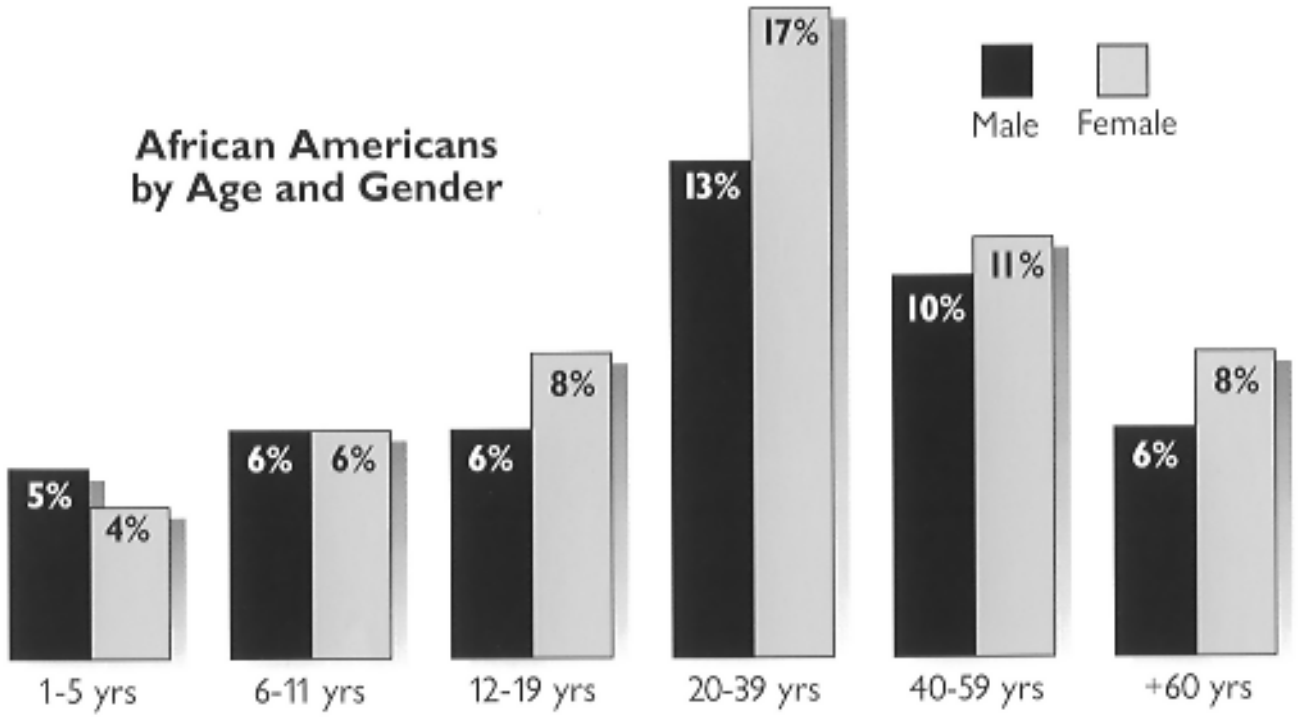
Scientific evidence links physical activity with improved health, yet African Americans do not get enough daily physical activity.

Taking Action to Improve Nutrition and Quality of Life

This chartbook provides information to help you prevent disease, promote health and develop programs for the African American community. We have used data from a national survey to illustrate our consumption of basic foods – grains, fruits, vegetables, dairy and meat. *Food Counts in the African American Community* provides you with an opportunity to compare information on how we are eating with information on how we should eat. When these comparisons are made for African Americans, there are often big differences between how we should eat and how we actually eat – a fact that may be connected to the large disparities in disease development that we see when comparing African American health status with other ethnic/racial groups. Balancing energy intake from food and energy expenditure in the form of physical activity work together to produce good health status. African Americans do not demonstrate optimal participation in regular physical activity. By highlighting these differences and providing a snapshot of food, nutrition and physical activity in the African American community, our aim is to point the way to better nutrition and healthier living.

POPULATION CHARACTERISTICS: A COMMUNITY SNAPSHOT

A total of 1,818 African Americans participated in the USDA Continuing Survey of Food Intakes by Individuals in 1994-96. They comprised 11 percent of the survey population. Forty-five percent were males and 55 percent were females as noted in the bar chart below. Forty-two percent of the sample were children, age 1–19 years old. Fourteen percent were elderly, age 60 years and older. This distribution of African Americans in the survey sample allowed us to examine food practices, nutrition knowledge and attitudes as well as physical activity by gender and among a variety of age groups. The sample was especially useful when we wanted to compare food and nutrition practices among African Americans with respect to multiple demographic characteristics. This may be the first in-depth examination of these factors that has been made available to the general public.



In a 1994–96 USDA food survey, a sample of 1,818 African American persons was comprised of:

- 45% males
- 55% females
- 42% children
- 14% elderly

Based on household income, 37% lived at or below the poverty level, while 43% were middle income and 19% were upper income.

Household Income

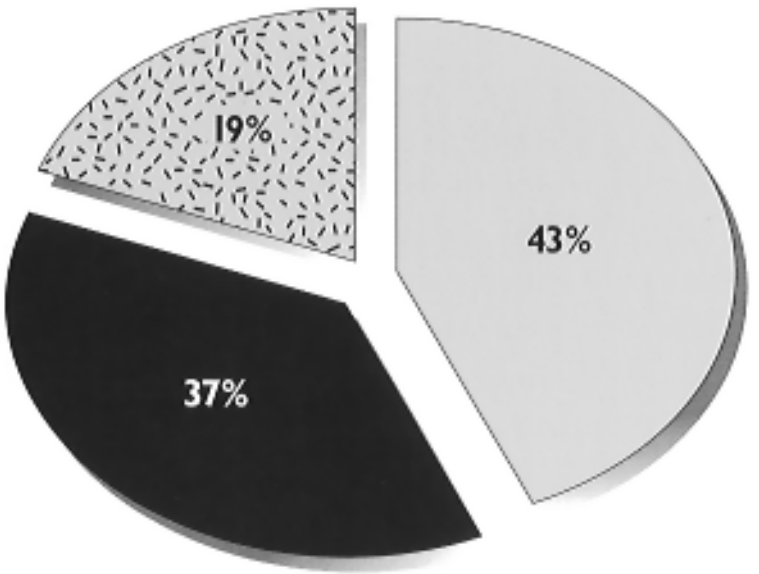
$=37%

$$=43%

$$$=19%

Almost a third of the sample participated in the Food Stamp Program.

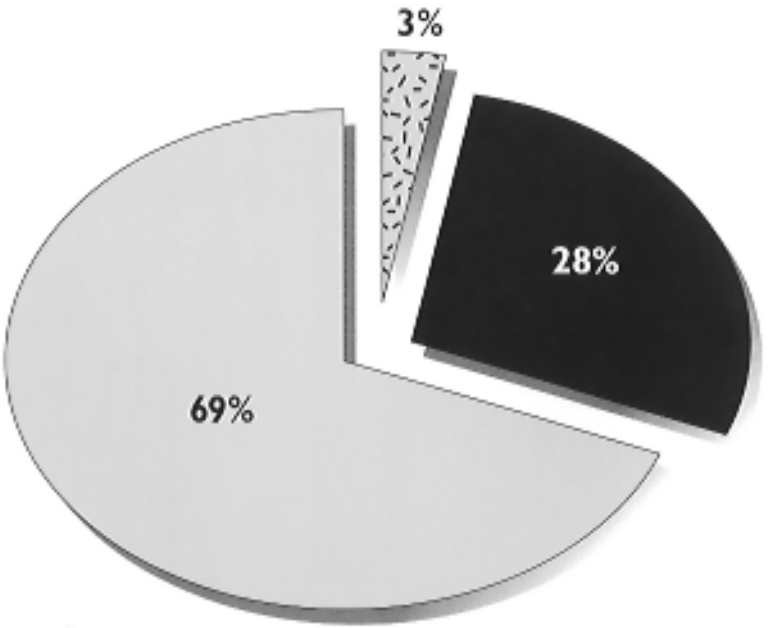
African Americans by Income



Low Income
Medium Income
High Income

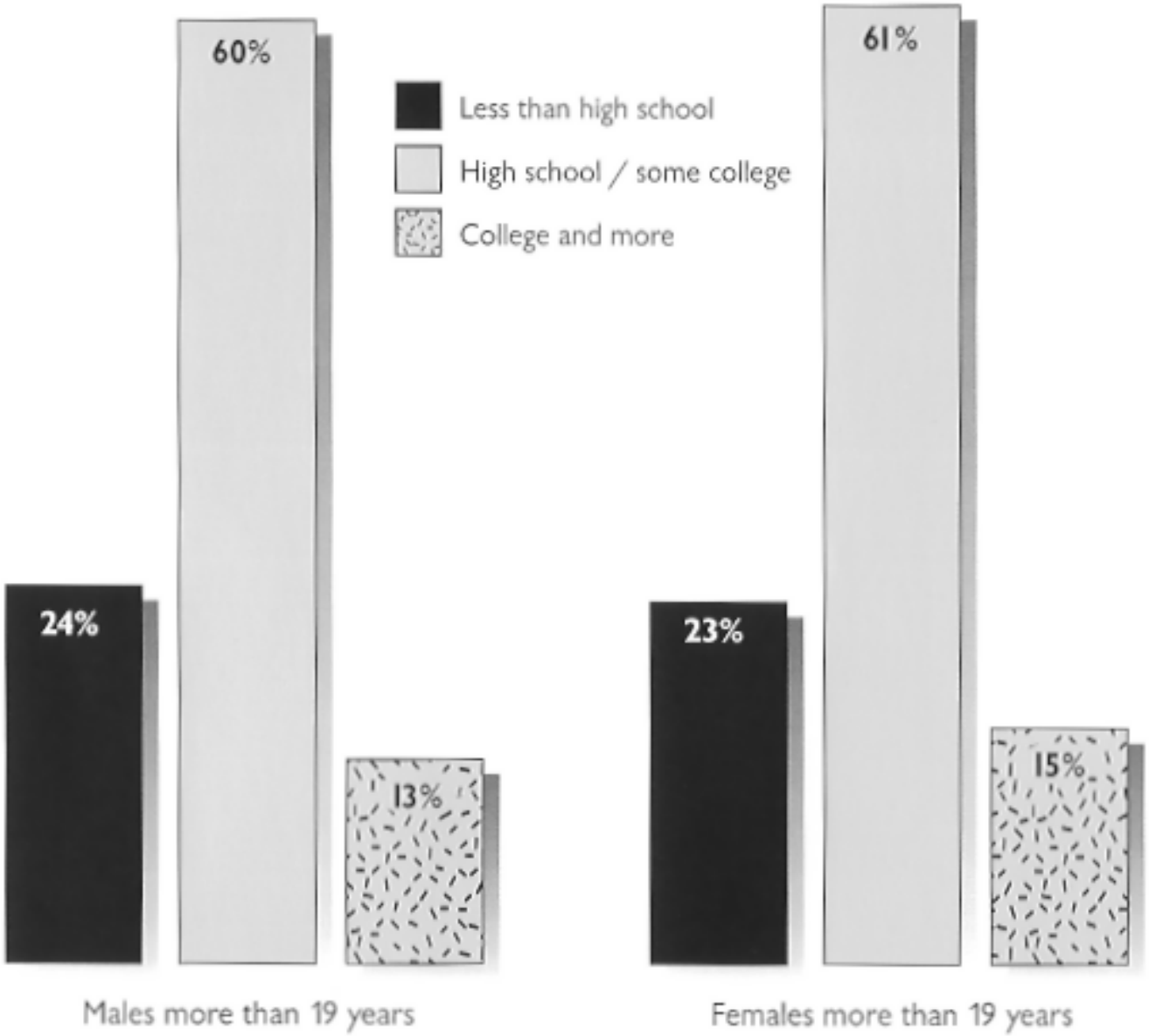
Note: In 1994-96, the income at 130% poverty for a family of four was about $19,700. The income at over 350% of poverty was more than $53,000.

African Americans by Food Stamps



Food stamp users
Non food stamp users
Unknown

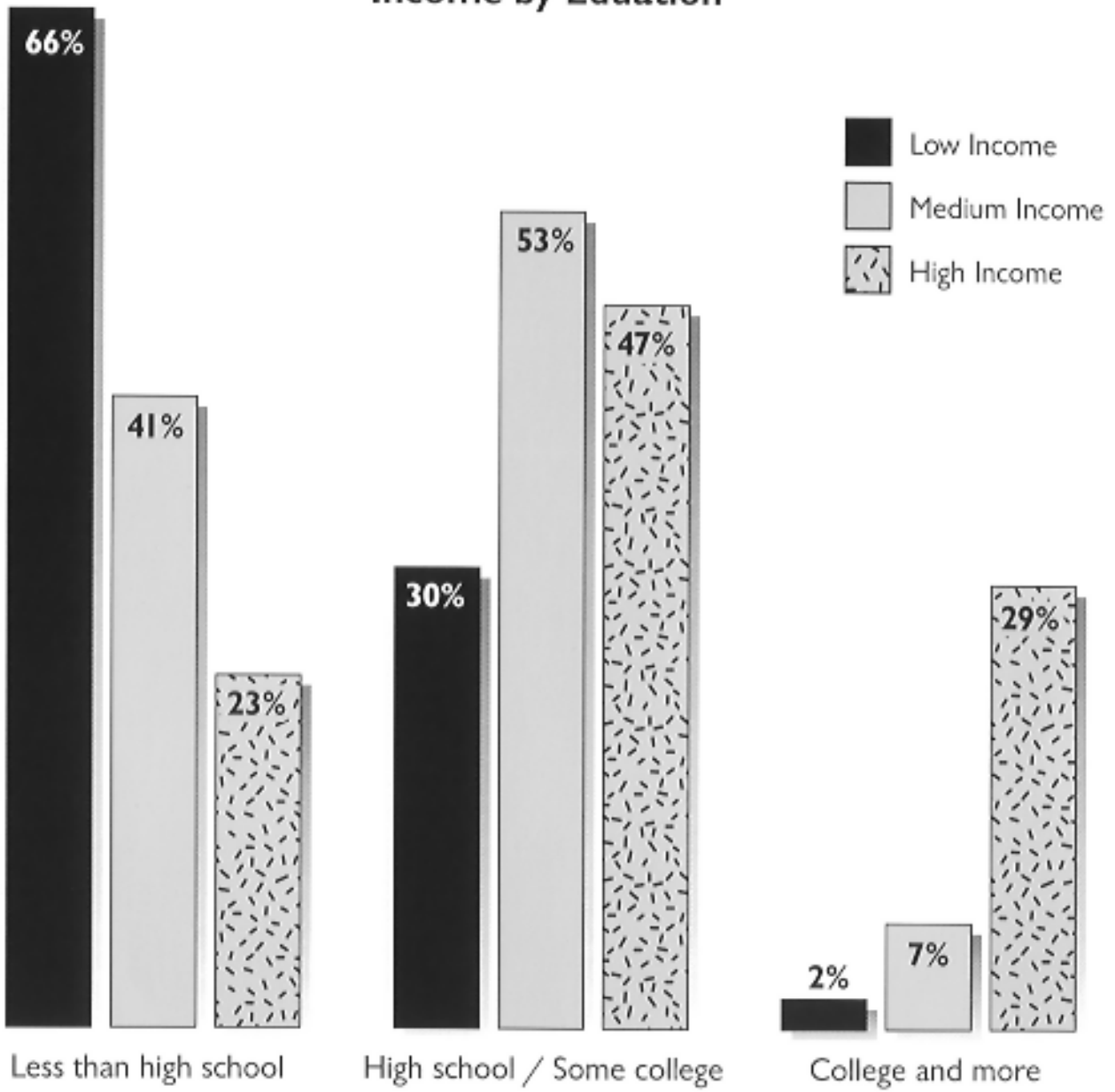
African American Education by Gender & Age



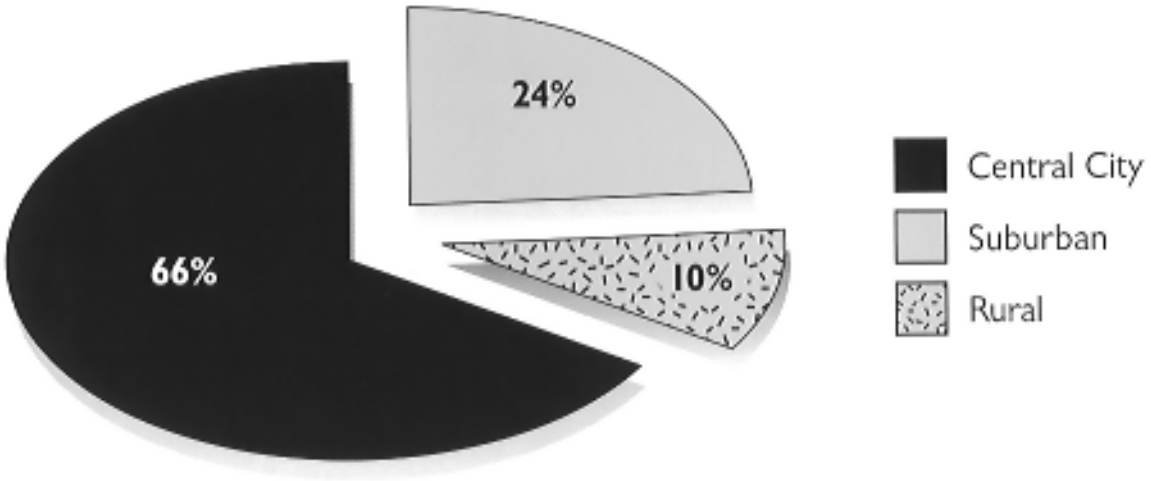
Almost 75% of the adults surveyed had completed at least a high school education or more.

African Americans with less education were more likely to have low incomes.

African American Income by Eduation



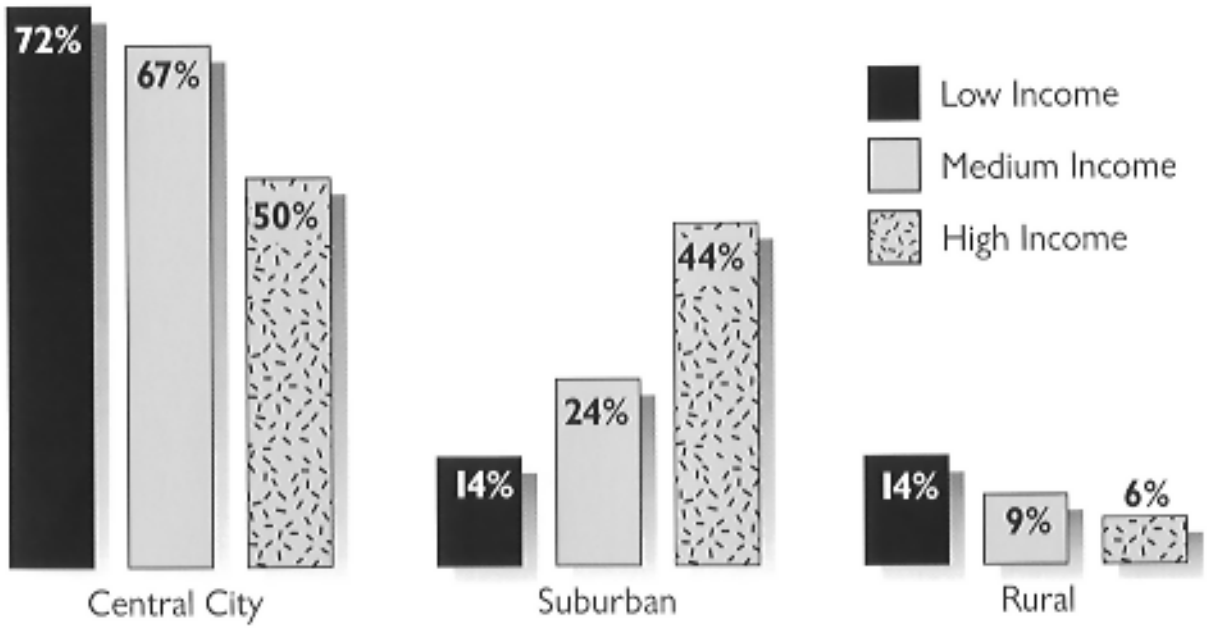
African Americans by Urbanization



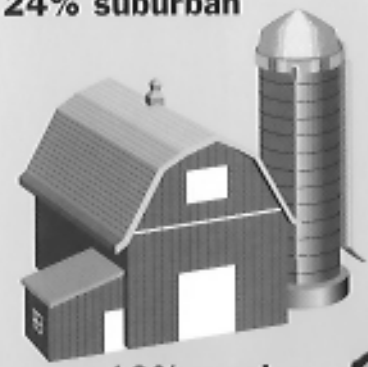
66% urban

The majority of survey participants lived in the central city–66%–compared to 24% suburban and 10% rural.

African American Income by Urbanization

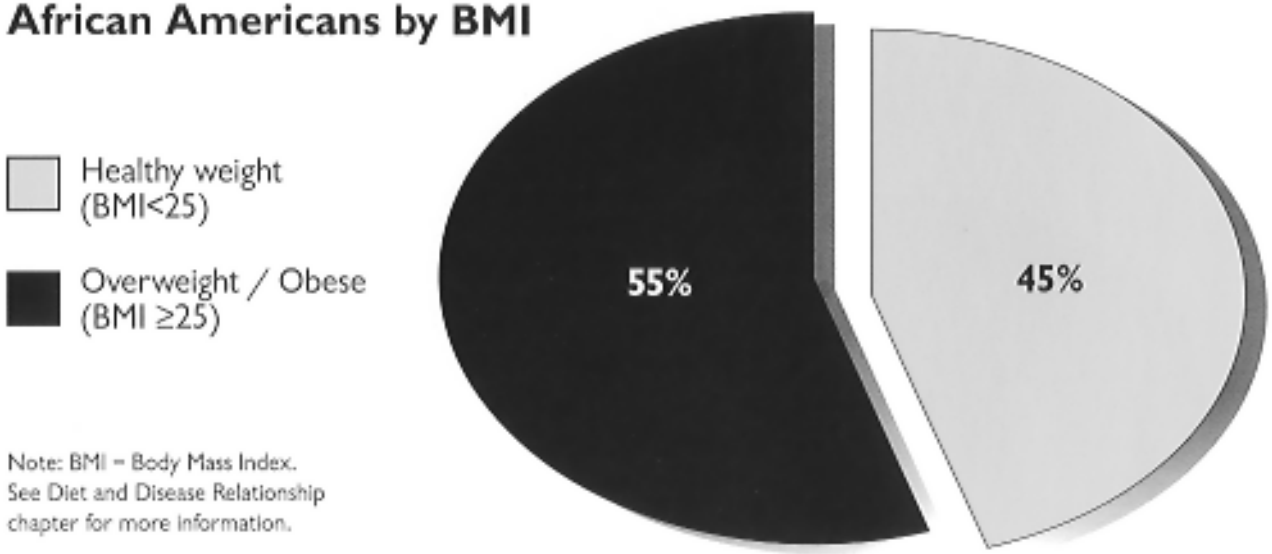


24% suburban



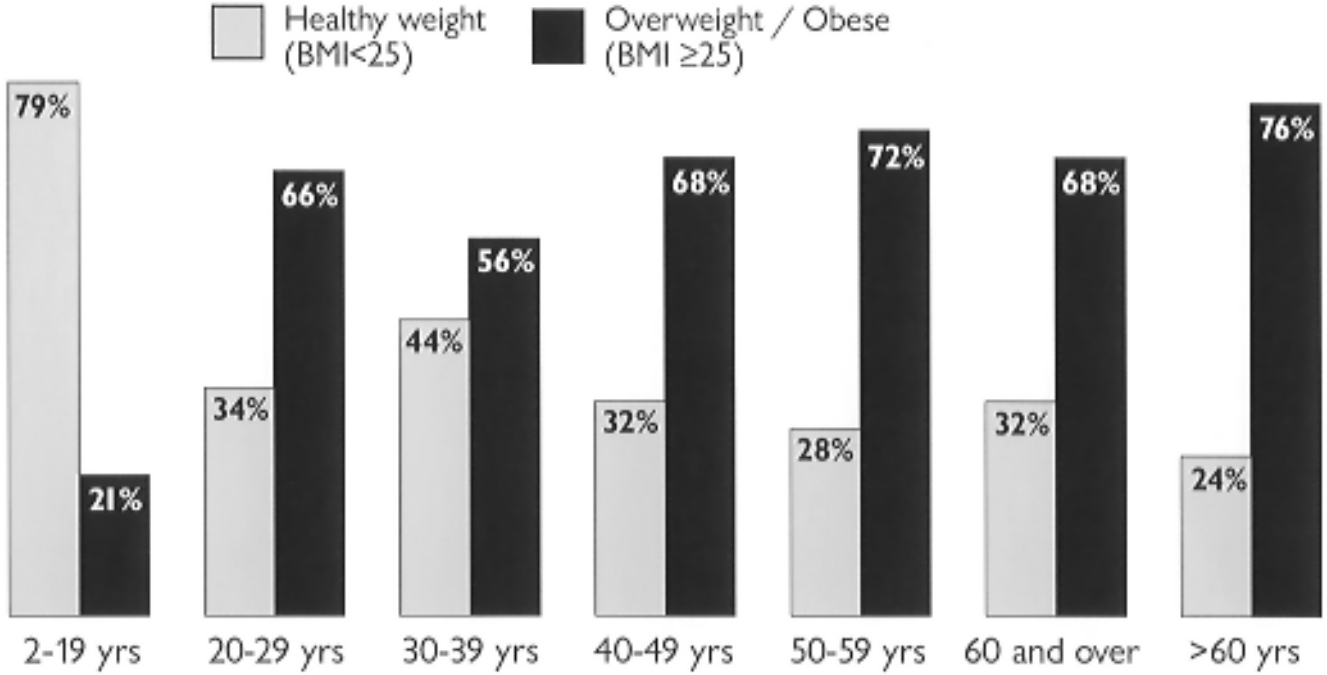
10% rural

African Americans by BMI



Note: BMI = Body Mass Index.
See Diet and Disease Relationship chapter for more information.

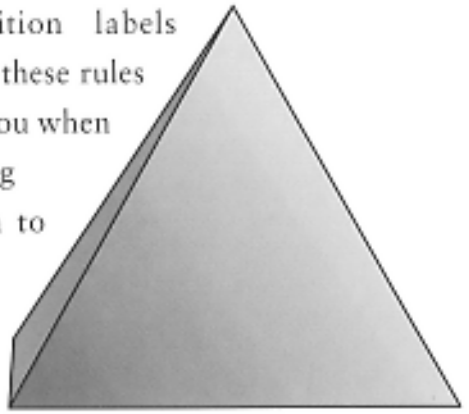
African Americans by Weight Status



DIETARY GUIDANCE

Eating is one of life's great pleasures. For many people, some of their best memories surround family meals. *The Food Counts in the African American Community* chartbook is intended to encourage you to enjoy eating in ways that can help you reduce your risk for possible diet-related diseases.

Dietary Guidelines, the Food Guide Pyramid, and nutrition labels are important tools created to help you make healthy food choices. Think of the Dietary Guidelines as "rules" to follow when choosing the types of food to include in your diet. The Food Guide Pyramid and nutrition labels help make these rules work for you when determining how much to eat of specific foods. Following is a presentation of the Dietary Guidelines, the Food Guide Pyramid and information from nutrition labels in an easy-to-understand format. We hope it will provide you and your family with essential tools you can use for healthy eating.



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Cholesterol 10mg	3%	3%
Sodium 560g	23%	31%
Total Carbohydrate 47g	16%	16%
Dietary Fiber 1g	4%	4%
Sugars 7g		
Protein 11g		

DIETARY GUIDELINES 2000

U. S. DIETARY GUIDELINES FOR THE YEAR 2000

Let the Pyramid guide your food choices.

Choose a variety of grains daily, especially whole grains.

Choose a variety of fruits and vegetables daily.

Choose a diet that is low in saturated fat and cholesterol and moderate in total fat.

Choose beverages and foods to moderate your intake of sugars.

Choose and prepare foods with less salt.

If you drink alcoholic beverages, do so in moderation.

Be physically active each day.

Aim for a healthy weight.

Keep food safe to eat.

U. S. Dietary Guidelines are the rules to follow when choosing what types of food to eat. New guidelines are developed about every five years.

Dietary Guidelines

The chart below compares the Dietary Guidelines developed since 1990. As you can see, the Guidelines have generally remained the same. However, in the Guidelines recommended for the year 2000, there are a few noteworthy issues. First, a separate category for fruits and vegetables emphasizes their importance while highlighting the need for five servings a day in the diet. The new Guidelines also urge us to limit beverages that are high in sugar, such as sodas. They continue to stress the need to be physically active, but now also emphasize maintaining a healthy weight. Finally, an added category for food safety reminds us that simple changes in preparing, serving and storing food may help control the spread of food-borne diseases.

The U. S. Dietary Guidelines have changed little over the past ten years. Changes to increase whole grains in the diet, monitor sugar intake, include physical activity and maintain a healthy weight are recommended for 2000.

2000	Let the Pyramid guide your food choices.	Choose a variety of grains daily, especially whole grains.	Choose a variety of fruits and vegetables daily.	Choose a diet that is low in saturated fat and cholesterol and moderate in total fat.	Choose beverages and foods to moderate your intake of sugars.	Choose and prepare foods with less salt.	If you drink alcoholic beverages, do so in moderation	Be physically active each day.	Aim for a healthy weight.	Keep food safe to eat.
1995	Eat a variety of foods.	Choose a diet with plenty of grain products, vegetables, and fruits.		Choose a diet low in fat, saturated fat and cholesterol.	Choose a diet moderate in sugar.	Choose a diet moderate in salt.	If you drink alcoholic beverages, do so in moderation.	Balance the food you eat with physical activity – maintain or improve your weight.		
1990	Eat a variety of foods.	Choose a diet with plenty of vegetables, fruits, and grain products.		Choose a diet low in fat, saturated fat and cholesterol.	Use sugar only in moderation.	Use salt and sodium only in moderation.	If you drink alcoholic beverages, do so in moderation.		Maintain a healthy weight.	

The Food Guide Pyramid

The Food Guide Pyramid is divided into five major food groups – grains, fruits, vegetables, meat, and dairy – and provides a simple outline of what to eat for a nutritious diet. The foods in one group cannot replace those in another group because the nutrients provided by each are necessary for a well-balanced diet. The Pyramid lets you choose a healthy diet that fits your lifestyle. One key to using the Pyramid effectively is to eat a variety of foods to get the nutrients you need and aim for a healthy weight.

The Food Guide Pyramid emphasizes daily servings of foods essential for a well-balanced diet. The number of servings right for you in each of the food groups is determined by your age, gender and the level of activity in your lifestyle. In general, young children and moderately active women should eat the number of servings at the lower end of the range. Most men, teenage boys and active women should eat servings at the higher end.

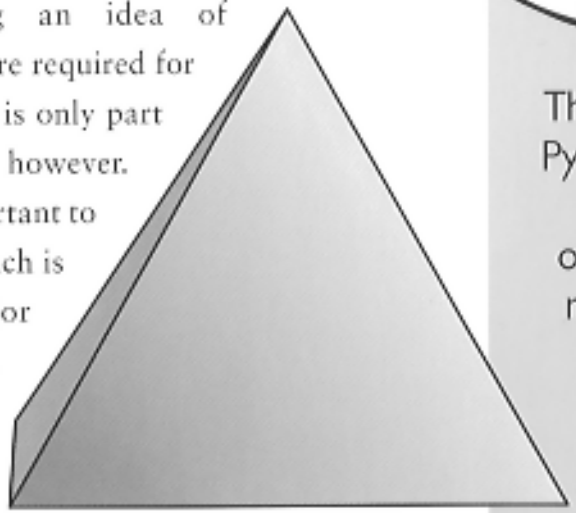
As demonstrated by their position at the base of the Pyramid, most of your calories should come from the grain group, the vegetable group, and the fruit group. Strive to make these foods abundant in your diet. Eat varieties of grains, such as rice, pasta, grits, and whole grain breads. Include varieties of vegetables and fruits, such as okra, beans, carrots, corn, greens, broccoli, apples, bananas, mangos, oranges, and many more. Fewer calories should come from the meat and dairy groups, found near the top of the Pyramid. Finally, only a tiny part of your diet should come from fats, oils and sweets and should be eaten sparingly.

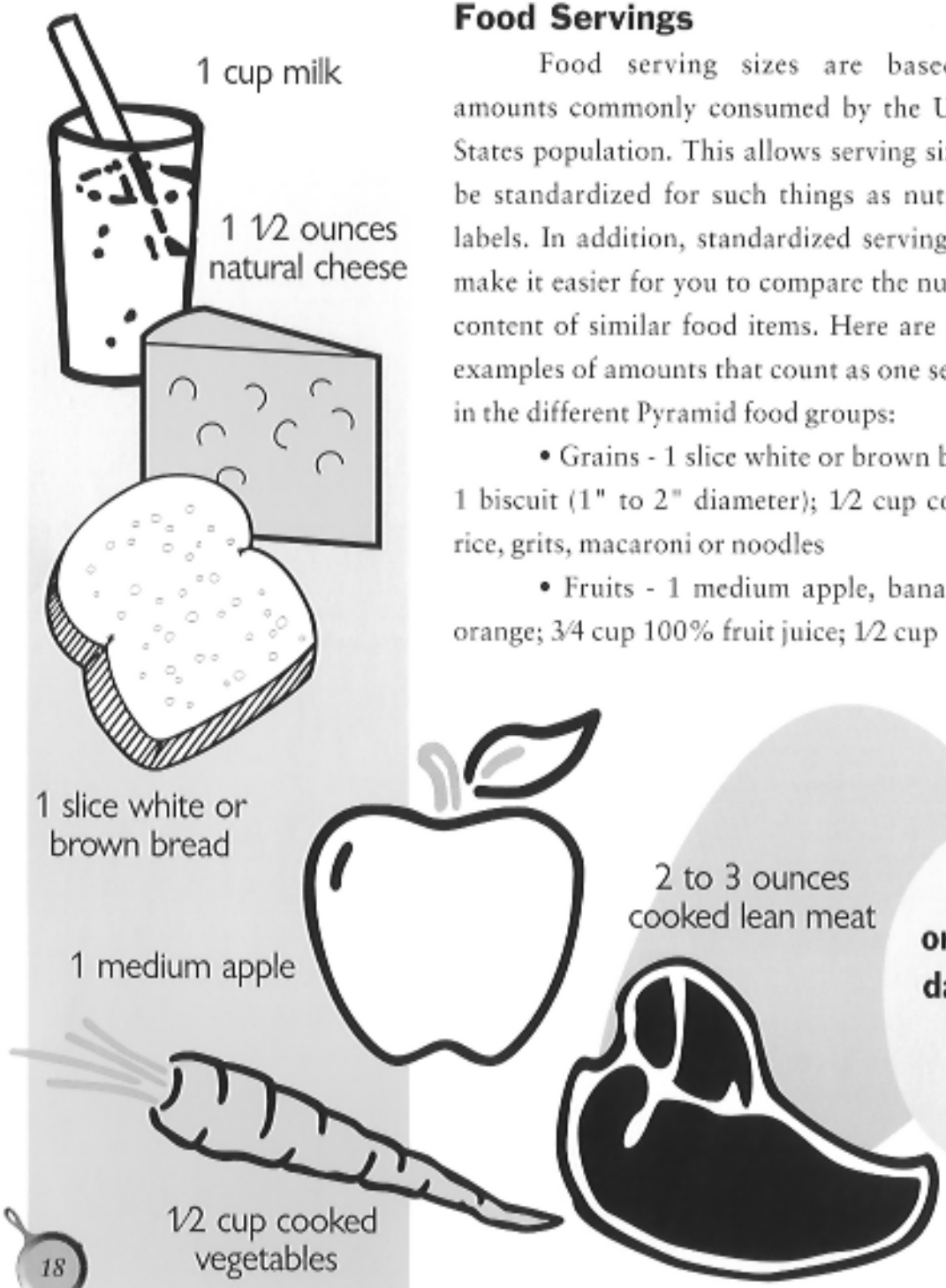
Food Group	Recommended Servings
Grain Group	6 to 11 servings
Fruit Group	2 to 4 servings
Vegetable Group	3 to 5 servings
Meat Group	2 to 3 servings
Dairy Group	2 to 3 servings

The foods in one group cannot replace those in another group because the nutrients provided by each are necessary for a well-balanced diet.

The key to using the Pyramid effectively is to eat a variety of foods to get the nutrients you need and aim for a healthy weight.

Having an idea of which foods are required for a healthy diet is only part of the picture, however. It is also important to know how much is too much (or too little) of a good thing.





Food Servings

Food serving sizes are based on amounts commonly consumed by the United States population. This allows serving sizes to be standardized for such things as nutrition labels. In addition, standardized serving sizes make it easier for you to compare the nutrient content of similar food items. Here are a few examples of amounts that count as one serving in the different Pyramid food groups:

• Grains - 1 slice white or brown bread; 1 biscuit (1" to 2" diameter); 1/2 cup cooked rice, grits, macaroni or noodles

• Fruits - 1 medium apple, banana or orange; 3/4 cup 100% fruit juice; 1/2 cup chopped, cooked or canned fruit (in light syrup or natural juice)

• Vegetables - 1 cup raw, leafy vegetables; 1/2 cup cooked vegetables (collards, okra, green cabbage, sweet potatoes); 3/4 cup low sodium vegetable juice

• Meat - 2 to 3 ounces cooked lean meat, poultry or fish (the size of a deck of cards or the palm of your hand); 1/2 cup cooked dried peas or beans; 1 tablespoon peanut butter; 1 egg

• Dairy - 1 cup milk or yogurt; 1/2 cup ice cream or frozen yogurt; 1 1/2 ounces natural cheese (cheddar, mozzarella) or processed cheese (American).

Once you understand what makes up one serving, you can see that it is not too hard to meet – or exceed – the recommended daily allowances. An easy way to note what and how much you are eating is to read nutrition labels found on food packages.

It's easy to meet or exceed recommended daily allowances of most food servings.

Nutrition Labels

The Nutrition Labeling and Education Act (NLEA) of 1990 requires most processed food manufacturers to carry nutrition information on their packaging in an easy-to-read format known as Nutrition Facts. Unprocessed foods, such as fresh fruits, vegetables, meat, and fish, are not required to have nutrition labels. However, nutrition information for these foods is often available where they are sold.

Reading a Nutrition Label

When you read a nutrition label, use its three main components to make healthy eating choices: the serving size, the amount of calories (calories from fat are an important part of this), and the % Daily Value (% DV) for specific nutrients.

The serving size shown on the nutrition label tells you how much of that food equals one serving. For example, according to the Food Guide Pyramid, 1/2 cup of cooked pasta equals one serving from the grains group. A 7.25 oz. box of processed macaroni and cheese states that it makes "about 3" one-cup servings – that equals about six recommended 1/2 cup grain servings. This simple example demonstrates how easy it can be to reach (or exceed) the recommended 6 to 11 servings of grain foods a day.

Calories are another important component of the nutrition label. Three daily calorie levels are shown to assist you in aiming for a healthy weight: 1,600, 2,200, or 2,800 calories a day. Select your calorie level according to your age, level of physical activity, and weight (for more information see Obesity, page 29). The amount of calories right for you determines the number of servings you should eat from the different food groups, as shown in the servings guide below. Choosing an appropriate number of servings, along with lower calorie foods within the food groups, will help ensure that you do not exceed your recommended calorie level. Additionally, no more than 30 percent of the calories in your overall diet should come from fat.

Nutrition Facts

Serv. Size 2.5 oz. (70g/about 1/3 box) (Makes about 1 cup)
Servings Per Container about 3

Amount Per Serving	In Box	Prep*
Calories	260	410
Calories from Fat	25	170
	%Daily Value* **	
Total Fat 2.5g	4%	28%
Saturated Fat 1g	6%	23%
Cholesterol 10mg	3%	3%
Sodium 560g	23%	31%
Total Carbohydrate 47g	16%	16%
Dietary Fiber 1g	4%	4%
Sugars 7g		
Protein 11g		

The Nutrition Labeling & Education Act (NLEA) of 1990 requires most processed foods to carry nutrition information on the package in an easy-to-read format.

Food Guide Pyramid Servings Guide

Calories	**1,600** (Lower)[1]	**2,200** (Moderate)[2]	**2,800** (Higher)[3]
Grain Group (servings)	6	9	11
Fruit Group (servings)	2	3	4
Vegetable Group (servings)	3	4	5
Meat (ounces)[4]	5	6	7
Dairy Group (servings)	2-3	2-3	2-3

[1] 1,600 calories is right for many sedentary women and some older adults.
[2] 2,200 calories is right for most children, teenage girls, active women, and many sedentary men. Pregnant and breastfeeding women may need more.
[3] 2,800 calories is right for teenage boys, many active men, and some very active women.
[4] For lean meat, poultry, or fish, 2–3 ounces count as one serving.
Adapted from: The USDA Food Guide Pyramid, USDA

1 Serving Size

2 Calories

3 % Daily Value

For a sedentary woman or older adult consuming 1,600 calories per day, no more than 480 calories a day should come from fat; for a child, teenage girl or active woman consuming 2,200 calories, no more than 660 calories should come from fat; and for a teenage boy, an active man or very active woman consuming 2,800 calories, no more than 840 calories should come from fat.

The number of fat grams in this food "when prepared" is four times as many as "in the box." Count your fat grams and calories according to the way you will prepare the foods you eat.

The third nutrition label component is the % Daily Value, or % DV. These numbers provide a way of determining just how much of certain nutrients a food product contains and how these nutrients fit into your overall daily diet. A % Daily Value (% DV) is determined for those nutrients most important to your diet: total fat; cholesterol; sodium; potassium; total carbohydrate; protein; vitamins A, C, D, B_6, B_{12}, folic acid, thiamine, riboflavin, and niacin; and minerals calcium, iron, and zinc. The % Daily Value listed is based on a person at a 2,000 daily calorie level.

In the example in the column to the left, let's evaluate total fat, the first nutrient listed on the nutrition label. If you are consuming about 2,000 calories a day, no more than 600 (30%) of these calories – or 65g – should come from total fat as shown on the bottom label. Now, looking at the third part of the nutrition label, the number next to "Total Fat" reflects the number of grams of total fat in each serving of this food (2.5g per serving in this example). The next column over shows the % Daily Value of total fat these grams represent for a 2,000-calorie diet (4% in the box, 28% per prepared serving). The total fat in one serving of this food when prepared as directed is 28% or 18.5 grams of the 65 fat grams that you are entitled to consume in one day.

By reviewing the nutrition label, it is easy to get an idea of how much you are eating, how many calories you are consuming, and what amounts of nutrients you are receiving. In this case, you can consume the remaining 72% or 46.8 grams of your recommended total fat allotment from your meals throughout the remainder of the day.

Another important part of food labeling is the list of ingredients, usually found beneath or adjacent to the Nutrition Facts. It is informative to note that the ingredients at the

Your dietary plan should include:

beginning of the list are always more abundant in the food than those at the end of the list.

Putting It Together

Once you understand the "rules" for choosing the types of food you should eat, as outlined by the Dietary Guidelines, look to the Food Guide Pyramid to help you make specific food choices. Consume those foods at the base of the Pyramid in greater quantities than the foods at the top of the Pyramid. Choose a variety of foods from the five food groups in order to get all the nutrients that you need and aim toward a healthy weight. Use the Food Guide Pyramid's recommended range of servings and calories related to your age, gender, and level of physical activity to determine how much to eat from each category. Finally, read nutrition labels to determine serving size, calories, and % Daily Values for important nutrients and fit particular foods into your dietary plan.

Now that you have the tools and know how to use them, you are on your way to creating a dietary plan that not only consists of foods that you and your family enjoy eating, but are also healthy for you.

Plan what you eat.
Eat what you plan.

Make a dietary plan for you and your family using the tools we've discussed in this chapter. The Dietary Guidelines, Food Guide Pyramid and Nutrition Labels work together to help you live a healthier, more nutritious lifestyle.

Use the *Food Counts in the African American Community* chartbook to help you understand and apply these tools for better nutrition and a healthier lifestyle.

NUTRITION AND THE LIFECYCLE

Women who have low intakes of folic acid are at increased risk of having an infant with incomplete development of the spine and brain.

Think about it ...

What you feed yourself before pregnancy affects the health of your baby during pregnancy.

Appropriate nutritional intake at each stage of life is important, starting in the preconceptional stage – when a woman is planning to become pregnant – and continuing throughout the aging process. Nutritional needs change throughout our lifecycle, requiring adjustments in the types and amounts of food we eat to maintain optimal health.

The Preconception Period

In order to deliver healthy infants, women need to begin their pregnancy with optimal nutritional and health status. We now know that women who have low intakes of folic acid are at increased risk of having an infant with neural tube defects, or incomplete development of the spine and brain. The spine and brain develop rapidly during the first 28 days of pregnancy, a time before most women know that they are pregnant. Therefore, women should also have adequate folic acid and other nutrient intake even before they become pregnant. That is why it is recommended that all women of childbearing age obtain 400mcg of folic acid per day in their diet from foods such as whole wheat bread, yogurt, orange juice and green vegetables, plus take a daily folic acid supplement of 400mcg. Woman who use the U. S. Dietary Guidelines and Food Guide Pyramid on a regular basis to plan their diet are in a good position to assure their good health and nutritional status before pregnancy. Women considering pregnancy should have their health status, including weight and nutrition, assessed by a professional health team during this time and make adjustments as needed.

Women who regularly use the Dietary Guidelines and Food Guide Pyramid to plan their diets are in a good position to assure their good health and nutrition before pregnancy.

The Prenatal Period

Adequate weight gain during pregnancy – that is, 25 to 35 pounds for women at a healthy weight, less for overweight or obese women, and more for women who are underweight – is very important for mother and child. Monitoring weight gain during

pregnancy is one of the easiest ways to see if things are going well. Sudden large weight gain or loss during pregnancy should be evaluated by the health care team. Eating a diet based on the Food Guide Pyramid is important to ensure that you get all the nutrients needed for a healthy pregnancy. It is recommended that nutrients for a healthy pregnancy come directly from food because food supplies not only all the nutrients needed, but also fiber to combat constipation that may accompany pregnancy during the later stages. Supplements for additional iron and folic acid are also recommended.

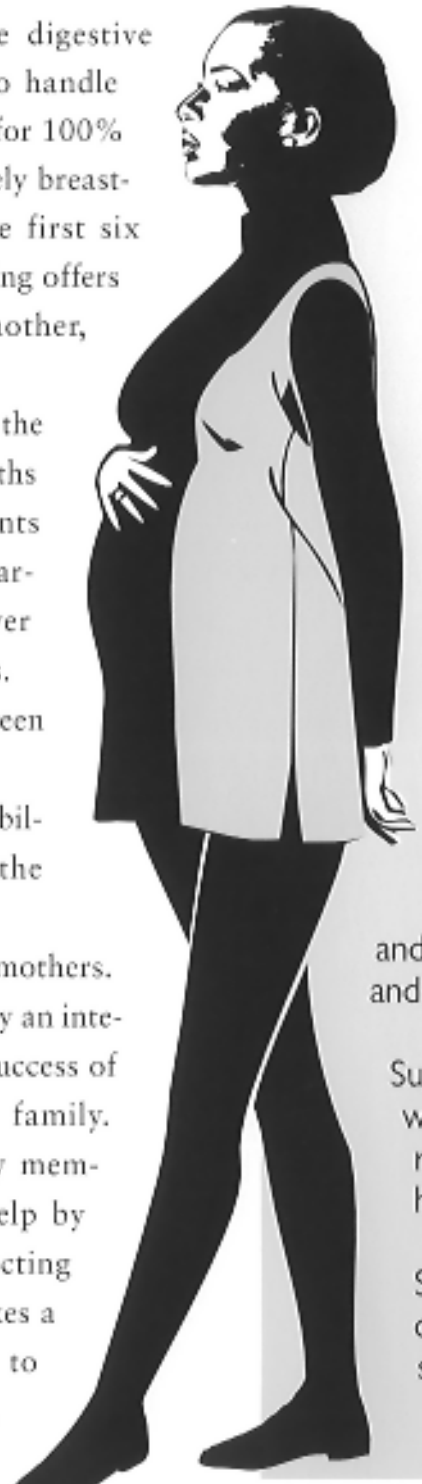
Infants

0 through 6 months

Breast milk alone is the only food recommended for infants during the first six months of life. This nutrition fact is highlighted because it is almost universally not followed. Breastfeeding rates are especially low among African Americans. Also, African Americans typically feed infants additional solid foods at inappropriately early stages – often during the first month of life, when the digestive system is not prepared to handle them. The goal should be for 100% of our women to exclusively breastfeed their infants for the first six months of life. Breastfeeding offers several benefits for mother, infant and the family:

1. All nutrients needed by the infant for the first six months
2. Protection for infants against ear infections, diarrhea and upper and lower respiratory tract infections.
3. Increased bonding between mother and infant.
4. Convenience and availability at all times and at the right temperature.
5. Weight loss for nursing mothers.

Fathers also should play an integral role in ensuring the success of breastfeeding for their family. Fathers and other family members or caregivers can help by supporting and protecting breastfeeding. It really takes a couple working together to make breastfeeding an optimal experience for



Keep yourself and your baby healthy and fit before birth.

Keep physically active. Continue to walk, do calisthenics, swim and participate in activities that you enjoy and your doctor approves.

Eat well. Use the Dietary Guidelines and Food Guide Pyramid to choose foods that will give you and your baby all the nutrition you need.

Rest well. Get adequate sleep at night and take naps to keep mentally and physically alert.

Supplement your diet with iron and folic acid as recommended by your healthcare provider.

Sudden large weight gain or loss during pregnancy should be evaluated by your healthcare team.

What happens to you nutritionally during childhood affects your health in later years.

It takes a whole village to raise a child. Parents, family members and key caregivers should work together to help children make good food choices.

Do you model good eating habits for your children in your own lifestyle?

the entire family. Fathers can help support breastfeeding by:

1. Learning about breastfeeding
2. Encouraging breastfeeding
3. Doing things for mother that allow her to rest (e.g. doing household chores, caring for other children, etc.)
4. Spending nurturing time with mother and baby
5. Being there

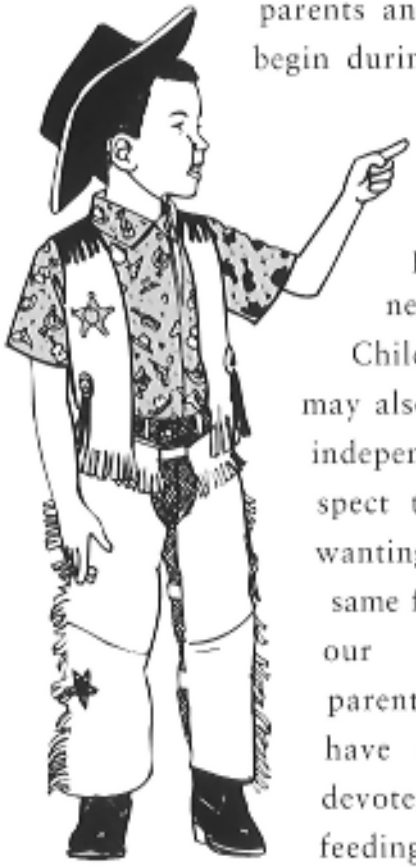
7 months to 1 year

Gradually introduce foods recommended in the Food Guide Pyramid to infants during the second six months of life. Starting with cereal, try one food at a time to determine if there are any allergic reactions. It's better to start additional foods with vegetables since babies have a natural ability to like sweet things such as fruits. If you begin with vegetables, babies will learn to eat them as they acquire taste preferences. Babies also should acquire skill in feeding themselves during this period. Teaching babies these skills requires considerable time and patience on the part of parents and caregivers. This valuable step should not be overlooked, since we know that good habits formed now will last a lifetime.

Children

Preschool

For the next 1 to 5 years, baby moves from toddler to preschooler. Food wars between parents and children often begin during this stage. As the pace of growth slows down during this period, a child needs less food. Children at this age may also begin asserting independence with respect to food choices, wanting to eat only the same food every day. In our hectic society, parents often do not have enough time to devote to appropriate feeding transitions for young children, delaying their food independence and allowing them to form poor food habits. This is another time when the family and perhaps other key caregivers need to work together to help children make good food choices and form good food habits. The best thing that parents can do is act as good role models by eating healthy with their children.



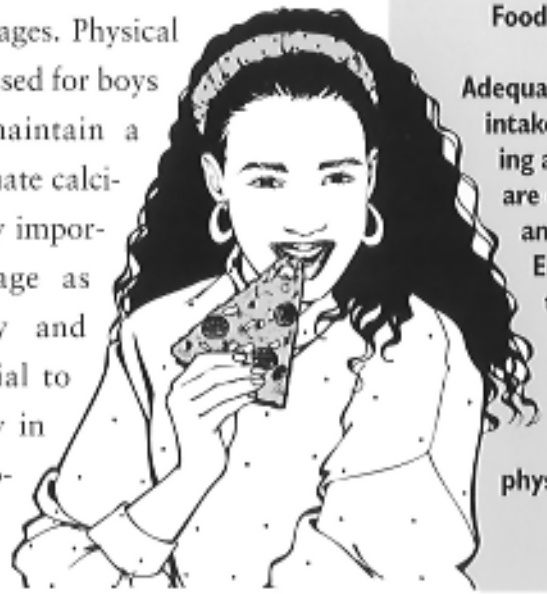
School age

For school-age children, food habits can shift dramatically. Children may spend up to 60 percent of their time away from home. Parents have less control over food preparation and foods the child selects and eats. At this stage of the lifecycle, children also are faced with the growing problem of obesity. African American children are at increased risk of obesity in childhood and research shows that overweight children are more likely to be overweight adults. If we help our children form good food and physical activity habits when they are young, we can help them maintain these practices as they grow older and move into more significant interactions with their friends. It really does "take a village to raise a child," and fortunate is the child who grows up in a community where it is appropriate to eat healthy.

Adolescents

As adolescents begin the growth spurt associated with this stage, their appetites increase considerably. Often, parents think their children and the refrigerator are one. In comparison to earlier stages in the lifecycle, adolescents eat a lot. Since they are preparing their bodies for optimal health, *they* should also make healthy food choices. Note that we say that they should make healthy food choices. This assumes that they have developed good food habits that have been monitored through childhood.

Maintaining a healthy weight is critical during this stage. While we want to ensure optimal growth and development, we do not want to encourage the onset of overweight or obesity during adolescence or their associated health risks in later stages. Physical activity should be stressed for boys and girls to help maintain a healthy weight. Adequate calcium intake is especially important during this stage as bones grow rapidly and there is great potential to improve bone density in order to prevent osteoporosis later in life.



Help Your Child Stay Fit!

African American children are at increased risk for developing obesity. Overweight children are more likely to become overweight adults at risk for developing chronic diseases, including diabetes.

Model good eating habits.

Keep nutritious, lowfat foods on hand for snacks or desserts.

Participate in physical activities with your child.

Teach your child to make good food choices using the Dietary Guidelines and Food Guide Pyramid.

Adequate calcium intake and maintaining a healthy weight are especially important for adolescents. Encourage your teenagers to drink and eat more calcium-rich foods and participate in physical activities.

Control Your Health!

Changes in your diet and lifestyle can improve your health and lower your risk for disease.

- **Decrease saturated fat in your diet.**
- **Increase physical activity.**
- **Quit smoking.**
- **Maintain a healthy weight.**

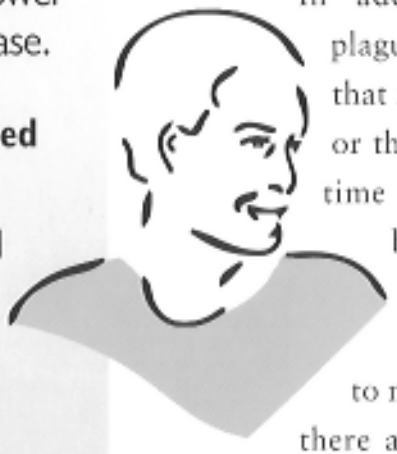
It is never too late to make changes in your lifestyle. There are many ways to overcome the obstacles that may get in your way.

Set small, achievable goals so that your success will motivate further action.

In 1990, there were 2.5 million elderly African Americans. By 2050, there will be over 9 million.

Adults

By the time they reach adulthood, many people think that it is too late to start developing good eating habits or an exercise program.



In addition, many people feel plagued by excessive weight gain that may seem impossible to lose, or they may find it hard to make time to eat right and exercise because of the demands placed on them at home and at work. It is never too late to make changes in your life and there are many ways to overcome the obstacles that may get in your way.

First, why make the changes? Abundant research conducted on middle-aged populations show improvements in health status, as measured by decreased disease development, through changes in dietary and other lifestyle behaviors. For example, decreasing intake of saturated fat, increasing exercise, quitting smoking and maintaining a healthy weight have been associated with a decrease in the development of many diseases such as coronary heart disease, stroke, diabetes, and high blood pressure. So adulthood is a perfect time to change any "bad" habits.

Secondly, how do you make these changes? The key is to do something. Set small, achievable goals so that your success will motivate further action. Finally, involve family and friends to gain the support that you will need to maintain these changes over many years. Good health is a key ingredient in making these years happy and productive. It is also rewarding to know that you have improved your own health as well as that of beloved family members.

Older Adults

As the American population continues to age, many people are living to be 100 years and older. Due to their lifelong commitment to healthy living, many of these people are physically active and mentally sharp, despite any underlying diseases. However, even at this stage of life, it is not too late to change your dietary habits and activity level in order to reduce your risk of developing or dying from a chronic disease. The name of the game is to live healthy, not just to live long. As at any age, before starting a new health program, work with a physician who can help you develop a strategy to improve your health while taking into account your medical history and physical limitations.

THE DIET AND DISEASE RELATIONSHIP

The Institute of Medicine Report on Diet and Health indicates that 4 of the 10 leading causes of death – heart disease, cancer, stroke and diabetes – are diet-related. These diseases cost Americans more than $200 billion each year in medical costs and lost productivity. Good nutrition is important for health, adequate growth and development, and a sense of well-being throughout our lifecycle. For African Americans, good nutrition is especially important due to the elevated occurrence of these diseases in our families.

Cardiovascular Disease

Coronary heart disease (CHD) is the most common cause of death in the United States among men and women. Mortality from CHD increases with age and death rates among African Americans are consistently higher than whites and other ethnic minorities within all age groups. The most common cause of coronary heart disease is atherosclerosis, a progressive disease of fat accumulation in the walls of blood vessels, especially in the heart, brain, and kidneys. Atherosclerosis is associated with high levels of low-density lipoproteins (LDL, or "bad" cholesterol), while high-density lipoproteins (HDL, or "good" cholesterol) is associated with decreasing the risk of developing atherosclerosis. In addition, total cholesterol levels can also predict risk for the development of atherosclerosis and death from CHD. Do you know your cholesterol numbers? Check out the chart below to determine your level of risk.

If your levels are too high, there is good news! Modification of the foods you eat combined with exercise has been shown to improve your lipid or cholesterol profile. Low intakes of saturated fat and cholesterol have been shown to increase HDL (good cholesterol), while decreasing LDL (bad cholesterol) levels [Table 1]. Dietary fiber, specifically solu-

Total Blood Cholesterol and HDL Cholesterol Categories

Total Cholesterol

Less than 200 mg/dL	Desirable
200 to 239 mg/dL	Borderline - High
240 mg/dL or greater	High

HDL-Cholesterol

Less than 35 mg/dl	Low HDL Cholesterol

Note: These categories apply to adults age 20 and above.

Know Your Numbers!

Do you know your blood pressure, BMI, and cholesterol levels? Check the blood pressure and cholesterol charts in this chapter and the Body Mass Index table in the section on Obesity.

Knowing your numbers can help you determine your health status and any changes you need to make for better health and nutrition.

Moderate your use of salt, increase your physical activity and have your blood pressure checked regularly.

ble fiber found mainly in oats, fruits, vegetables, and legumes, such as dried beans and peas, has been shown to decrease total and LDL cholesterol. Finally, elevated levels of homocysteine, a substance in the body that is influenced by folic acid and certain enzymes, have been associated with an increased risk of CHD, possibly by increasing levels of LDL cholesterol. Therefore, increasing folic acid in the diet may decrease your homocysteine levels as well as your risk of CHD.

In addition to coronary heart disease, hypertension is another cardiovascular disease that poses a real threat to the health of Americans, especially African Americans. Hypertension is defined as systolic and diastolic blood pressure greater than or equal to 140/90mm Hg. Again, African Americans show a higher prevalence of hypertension than whites and other ethnic groups. Hypertension is called the "silent killer" because people can be without symptoms for years, then develop fatal outcomes such as coronary heart disease or stroke.

Most hypertension has no known cause and is, therefore, called "primary" or "essential" hypertension. While the cause is unknown, many modifiable risk factors have been identified. Factors that have been shown to increase the development of hypertension are excessive salt intake, high alcohol consumption, physical inactivity, and obesity. In terms of salt intake, some groups of people are considered "salt-sensitive," meaning their blood pressure level is strongly influenced by the amount of salt in their diet. Salt-sensitivity is associated with being African American, obese, and elderly. Given the relationship between dietary fat intake, obesity, hypertension, and CHD, there are many ways you can improve your health out-comes, but this is only possible if you know your numbers!

Blood Presure Categories for Adults*

	Systolic**		Diastolic**
Optimal	<120 mm Hg	and	<80 mm Hg
Normal	<130 mm Hg	and	<85 mm Hg
High Normal	130–139 mm Hg	or	85–89 mm Hg
High			
Stage 1	140–159 mm Hg	or	90–99 mm Hg
Stage 2	160–179 mm Hg	or	100–109 mm Hg
Stage 3	≥ 180 mm Hg	or	≥110mm Hg

* Categories are for those age 18 and older and come from the National High Blood Pressure Education Program. The categories are for those not on a highblood pressure drug and who have no short-term serious illness.

** If your systolic and diastolic pressure fall into different categories, your overall status is the higher category.

< means less than, and ≥ means greater than or equal to

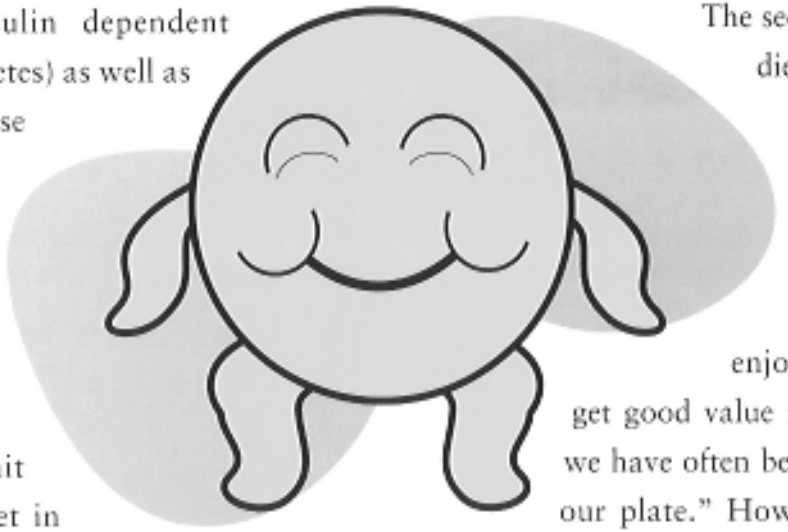
LDL - Cholesterol Categories

Less than 130 mg/dL . . . . . Desirable
130 to 159 mg/dL . . . . . Borderline-High Risk
160 mg/dL or greater . . . . . High Risk

Note: These categories apply to adults age 20 and above.

Obesity

Defined as "a state of excessive fatness, either general or localized," obesity has reached epidemic levels in the United States. African Americans are experiencing especially high levels of obesity at all ages. The most recent surveys show that 57 percent of African American men and 66 percent of African American women are either overweight or obese. Obesity is a major factor in the development of non-insulin dependent diabetes (type II diabetes) as well as coronary heart disease (CHD) and hypertension. While we know that diet and physical activity must work together to decrease obesity, we will limit our discussion to diet in this chapter.



"Fat Graham"

Two elements of diet have been found to be important: 1) fat consumption and 2) portion or serving size. The first element of the diet related to obesity is total fat consumption. Fat consumption is important because fat contains 9 calories per gram while carbohydrates and proteins, the other energy nutrients, contain only 4 calories per gram. Eating the same amount of fat as protein gives you twice as many calories. Foods naturally high in fat, foods fried in fat and foods with fat added, quickly add calories to the diet. Consuming more calories than we need for the amount of energy we expend on a daily basis leads to obesity [Table 2]. The goal, of course, is to achieve a "healthy weight" and maintain it over a lifetime. We will talk more about a healthy weight later.

The second element of the diet related to obesity is portion or serving size – the amount that you eat. We tend to overeat because we enjoy food, we like to get good value for our money and we have often been taught to "clean our plate." However, bigger is not better if it leads to taking in too many calories.

The simplest way to know if you are taking in too many calories is to see if you are gaining too much weight. For children, excess weight gain is any that is unrelated to growth. Check with your healthcare provider if you have questions about your child's weight. For pregnant women, excess weight is any more than that which should be gained during pregnancy.

57% of African American men and 66% of African American women are either overweight or obese.

"Protein Graham"

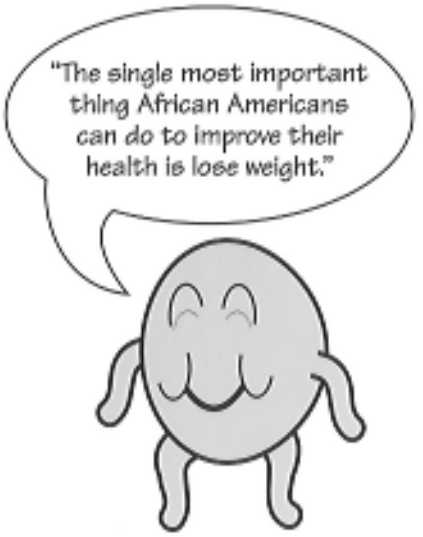
1 Fat Gram = 9 calories
1 Protein Gram = 4 calories
1 Carbohydrate Gram = 4 calories

Eating the same amount of fat as protein gives you twice as many calories.

A "healthy weight" is a proportional measure of your height and your weight. A healthy weight should be maintained throughout your lifecycle.

The singular most important thing that African Americans can do as a group to improve their health status is to lose weight.

What is a "healthy weight"? Scientists have determined that a better way to assess the effects of weight is by the Body Mass Index (BMI). The BMI is a proportional measure of how heavy you are at a given height and is calculated by dividing your weight by the square of your height. A healthy weight has been defined as a BMI between 19 and 25. The chart below provides an easy means for you to find your BMI. All you have to do is find your height in the left-hand column (example: five feet tall = 5'0"). Then move your finger across the line until you find your approximate weight. Next, move your finger to the top line and you will see your BMI. A BMI from 25 through 29 is considered overweight. A BMI of 30 and above is obese. While overweight and obesity are the major problems, we note that a few people have a BMI of less than 19 and may, therefore, have an unhealthy low weight.



Body Mass Index Chart

Find your BMI on the chart and determine your healthy weight.

1) Find your height in inches.

2) Move across the line until you find your approximate weight.

3) Move your finger to the top of that column to see your BMI.

	HEALTHY WEIGHT						OVERWEIGHT					OBESE			
Height (ft/in)	19	20	21	22	23	24	25	26	27	28	29	30	35	36	37
	BODY WEIGHT (pounds)														
4'10"	91	96	100	105	110	115	119	124	129	134	139	143	167	172	177
4'11"	94	99	104	109	114	119	124	128	133	138	143	148	173	178	183
5'0"	97	102	107	112	118	123	128	133	138	143	148	153	179	184	189
5'1"	100	106	111	116	122	127	132	137	143	148	153	158	185	190	195
5'2"	104	109	115	120	126	131	136	142	147	153	158	164	191	196	202
5'3"	107	113	118	124	130	135	141	146	152	158	163	169	197	203	208
5'4"	110	116	122	128	134	140	145	151	157	163	169	174	204	209	215
5'5"	114	120	126	132	138	144	150	156	162	168	174	180	210	216	222
5'6"	118	124	130	136	142	148	155	161	167	173	179	186	216	223	229
5'7"	121	127	134	140	146	153	159	166	172	178	185	191	223	230	236
5'8"	125	131	138	144	151	158	164	171	177	184	190	197	230	236	243
5'9"	128	135	142	149	155	162	169	176	182	189	196	203	236	243	250
5'10"	132	139	146	153	160	167	174	181	188	195	202	209	243	250	257
5'11"	136	143	150	157	165	172	179	186	193	200	208	215	250	257	265
6'0"	140	147	154	162	169	177	184	191	199	206	213	221	258	265	272

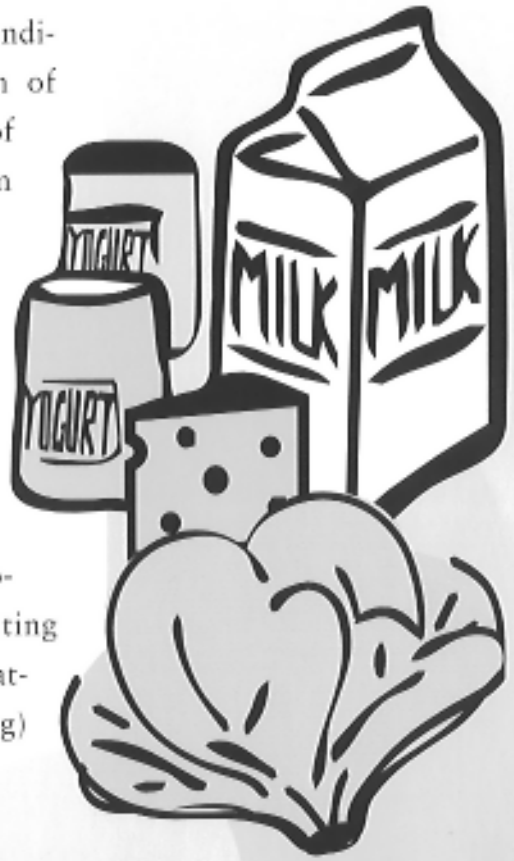
Osteoporosis

Osteoporosis is a condition of decreased bone density (or amount of bone) which leads to reduced skeletal strength. Therefore, fractures tend to occur with minimal stress. Osteoporosis is the underlying cause of most bone fractures in postmenopausal females and the elderly. Surveys show us that 25 million Americans have been affected by osteoporosis and there are about 1.5 million fractures each year at an estimated cost of $10 billion in health care and lost productivity. In addition, there is the pain and suffering experienced by these patients and their families. African Americans are especially at risk because consumption of calcium is very low in our community. Bone density is influenced by diet and physical activity. The dietary effects of bone density are discussed below.

Skeletal bone consists of collagen fibers and a calcium/phosphate mixture that forms the hard substance of the bone. In fact, calcium is the most abundant mineral in the body, with 99% of the calcium in your body being found in the bones and teeth. Therefore, inadequate dietary calcium intake can result in weaker bones, especially during periods of rapid growth for children and for postmenopausal women. Dairy products, green vegetables, calcium-fortified juices and fish with bones are good sources of calcium.

Calcium is best absorbed through acidic areas of the body such as the stomach, where lactose, a sugar found in dairy products, enhances its absorption. Lactose intolerance – the inability to absorb this sugar – is a condition that can affect your consumption of dairy foods. An estimated 60 to 95% of adult African Americans, Mexican Americans, Native Americans, Asian Americans and people of Jewish descent are lactose intolerant. For these groups of people, eating dairy foods that contain lactose can cause cramps, diarrhea and reduced calcium absorption. Additionally, lactose intolerance may lead to low calcium intake and osteoporosis, especially among women. Eating adequate calcium rich foods and participating in load-bearing exercise (e.g. walking) can help protect against osteoporosis.

Calcium intake is very low in the African American community.



Lactose intolerance – which may affect up to 70% of African Americans – can result in low calcium intake and osteoporosis. Eating calcium rich foods and participating in exercises such as walking can help protect against osteoporosis.

80 to 90% of cancer development is thought to be due to environmental causes with 35% of these thought to be diet related.

Increased risk of colon cancer has been associated with a diet high in total fat and low in fiber.

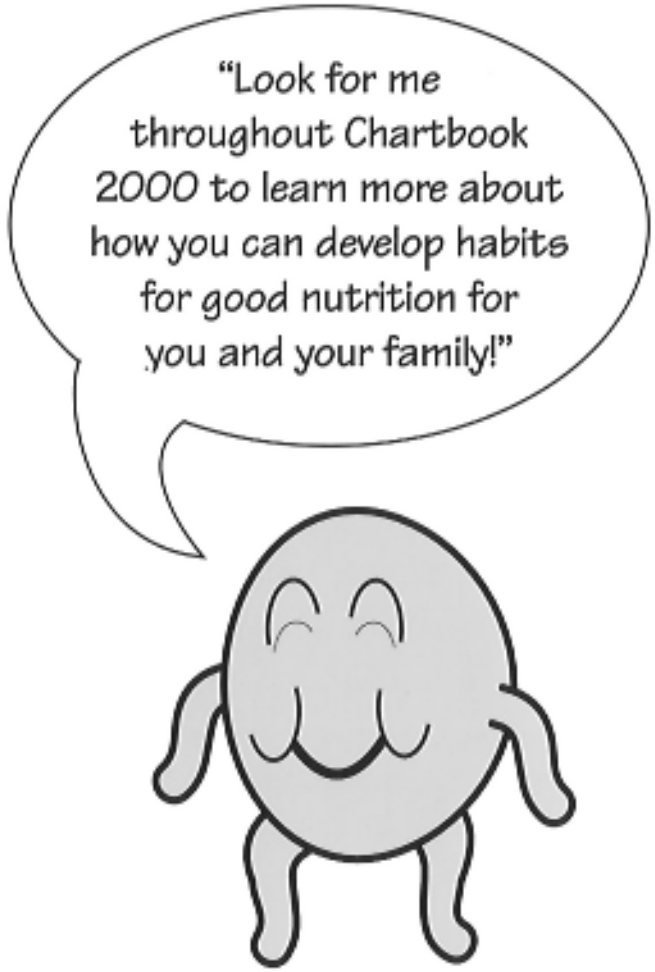
Low intake of fruits and vegetables is related to an increased risk of most types of cancer.

Cancer

Cancer is the second leading cause of death in the United States. While there are some genetic determinants of cancer development, 80 to 90% is thought to be due to environmental causes with 35% of these thought to be diet related (although conclusive evidence is not yet available). Some of the suggested dietary relationships include an increased risk of colon cancer associated with a high total fat diet and a low fiber diet (specifically low intake of insoluble fiber found in such foods as vegetables, some fruits, and whole grains).

Low intake of fruits and vegetables is related to an increased risk of most types of cancer. Several anticancer agents are found in these foods, including antioxidants (vitamin A, E and C, beta-carotene, and selenium) and phytochemicals (e.g. flavonoids and plant sterols), which are non-nutritive compounds found in plants that prevent cell damage.

Excessive alcohol consumption has been associated with an increased risk of cancers of the mouth, pharynx, larynx, esophagus and liver. While dietary factors play a significant role in cancer development, cigarette smoking has been implicated in the development of lung cancer, mouth, larynx, esophagus and bladder cancer.



Conclusion

Since food intake is related to the onset of chronic diseases and culturally influenced, we need to start early with our children to develop habits of good nutrition. Families, schools and communities need to work together to ensure that children have opportunities to achieve and maintain healthy practices throughout life.

PHYSICAL ACTIVITY THROUGHOUT THE LIFECYCLE

During the past decade, physical activity has gained in importance as a tool for health promotion. There are many newspaper, magazine, and television stories about how regular physical activity can improve your health. Why is physical activity important? It can increase fitness levels and the amount of lean tissue, which burns more energy than fat tissue. Therefore, the effects of being fit are working for you even when you are not exercising.

The problem is that Americans are not very active. The fact is that we are becoming more inactive with each passing day. In our lives, many conveniences contribute to our inactivity: cars, elevators, microwave ovens, and fast food restaurants. We don't even have to get up to switch channels on the television. The bottom line is that it is very easy to eat too much and very hard to get enough physical activity. The imbalance between energy intake and energy output has led to record levels of overweight and obesity among adults and children in the United States.

Based on many decades of research, beneficial health effects have been attributed to regular moderate-intensity physical activity. Numerous studies suggest that physical activity may decrease the risk of cardiovascular diseases such as coronary heart disease, hypertension, and non-insulin dependent diabetes mellitus (NIDDM). In conjunction with calcium intake, regular exercise decreases the development of osteoporosis by increasing peak bone mass as well as decreasing the rate of bone loss. Physical activity may improve the quality of life for those who suffer from osteoarthritis by improved functional status and physical fitness. Physical activity is also important in fat reduction, healthier fat distribution and increased muscle mass.

Physical activity may:

Decrease risks of coronary heart disease, hypertension and non-insulin dependent diabetes.

Help increase peak bone mass and decrease the risk of osteoporosis.

Reduce fat and increase muscle mass.

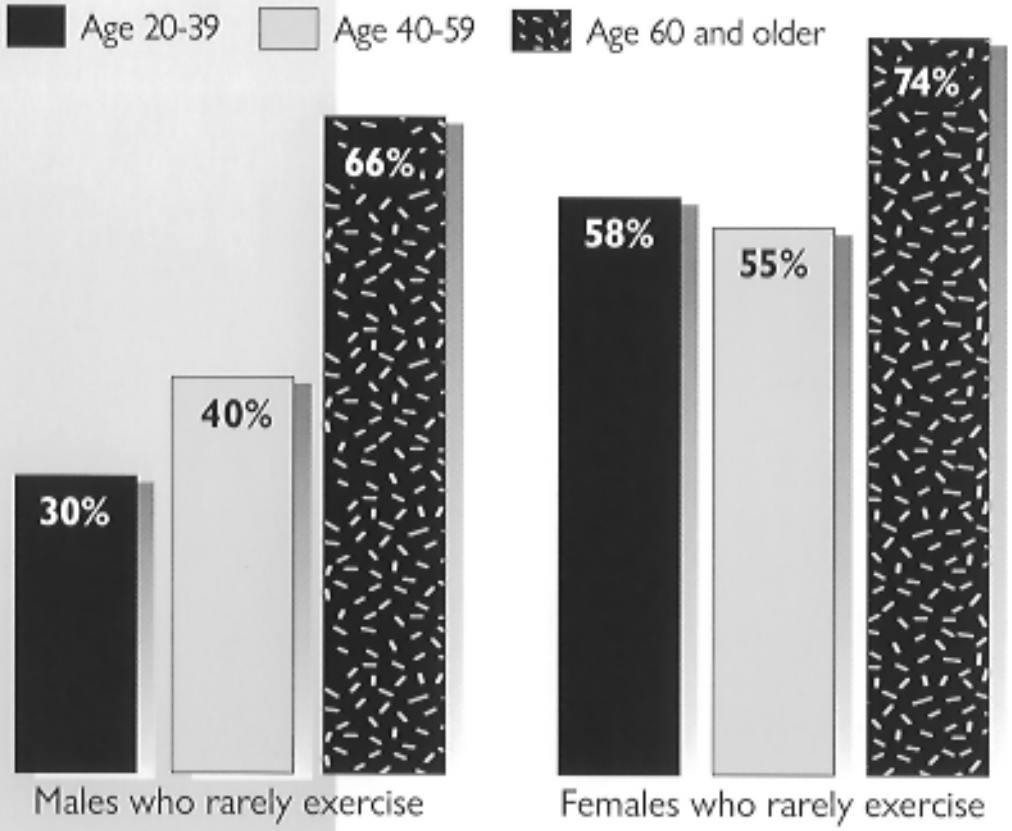
Improve mental health.

The benefits of exercise can work for you even when you're not exercising.

55 to 74% of African American women rarely exercise while 30 to 66% of the men rarely do.

Physical activity has also been associated with improved mental health status. Those who exercise regularly tend to have reduced symptoms of anxiety and depression, elevated mood or affect, and improved cognitive functioning. Finally, there is evidence that physical activity may play a role in the reduction of cancer of the colon, breast, and lung.

Despite the growing knowledge about the positive health effects of physical activity, a large segment of the population does not exercise. National figures suggest that 23% of the adult population participates in a sedentary lifestyle. Among the African American participants in the USDA Continuing Survey of Food Intakes by Individuals, 55 to 75% of the females in all age categories rarely exercise, while 30 to 66% of males rarely exercise. (Table 3) As displayed in the figure at left, the proportion that rarely exercise increases with age.



But the story does not end there. A healthy lifestyle not only includes regular physical activity, but the maintenance of a healthy weight. As discussed in the chapter on diet and disease, we introduced the concept of body mass index (BMI) as a more accurate measure of weight. A BMI from 25 through 29 is considered overweight and above 29 is obese. According to the national figures, 37% of African American females over 20 years of age are obese compared to 23% of white females over the age of 20. The proportions are very different for men – 21% of African American males and 20% of white males over the age of 20 are considered obese; however, the numbers are still too high.

Research has identified three basic types of physical activity: activities of daily living, occupational activities, and leisure-time sports. Activities of daily living include

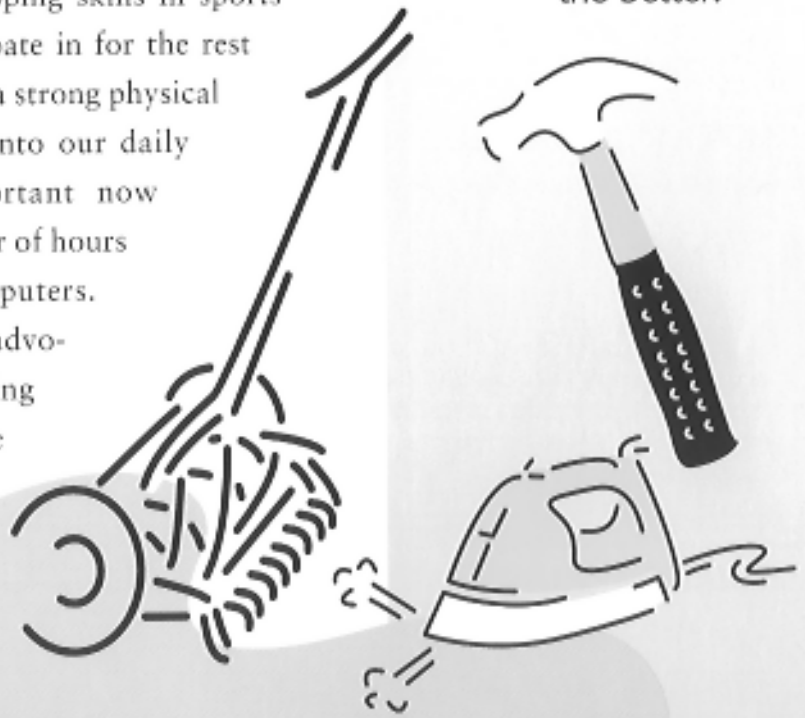
those that you do around the house and in the community. The problem is that now people don't use as much energy as they used to in these activities. For example, cars have decreased the amount of walking we do, convenience and ready-to-eat foods have greatly decreased our energy expenditure associated with food preparation and washing machines have decreased our energy expenditure used for keeping clothes clean. While we may not want to start washing our clothes by hand, we can do more walking and food preparation to improve the amount of energy consumed.

Occupational activities involve energy expenditure encountered during work. While some jobs still require a lot of energy expenditure, many jobs do not. Many people spend most of their day in sedentary jobs. In addition, you may consume many high fat, high energy meals during the day and spend the evening watching television. This is the perfect formula for the early onset of chronic disease and premature death. While most of us cannot change our jobs, we can, however, change the way we operate during the day by walking up the stairs instead of taking the elevator, or using half of a lunch hour to power walk.

Leisure sports are those that expend energy during team or individual sporting activities. Many adults did not develop skill in a sport when they were growing up, therefore, they don't spend much leisure time in sports activities. Schools should work hard to add more physical activity to their curriculum. Students need to know the importance of getting fit and developing skills in sports that they can participate in for the rest of their life. Building a strong physical activity component into our daily lives is more important now because of the number of hours we spend using computers. While we are strong advocates for promoting computer literacy, we have to recognize that working at a computer is a sedentary activity. We must balance this time with daily physical activities that can keep us fit and healthy.

Given the vast beneficial effects of physical activity, recommendations have been set forth by the Surgeon General to improve the health status of all Americans (see

You can change your habits by adding activity to your daily routine. Any movement you do burns calories. The more you move, the better.



Daily living activities include things you do around the house and yard. Occupational activities include those associated with your work. Leisure sports involve team or individual sporting activities.

Walking is an overall aerobic exercise that can help lower your blood pressure, strengthen your heart, and improve your circulation and overall fitness.

Walking with a partner is fun and can help you keep walking as part of your lifestyle.

Walking is easier on your joints and leads to fewer injuries than running or jogging.

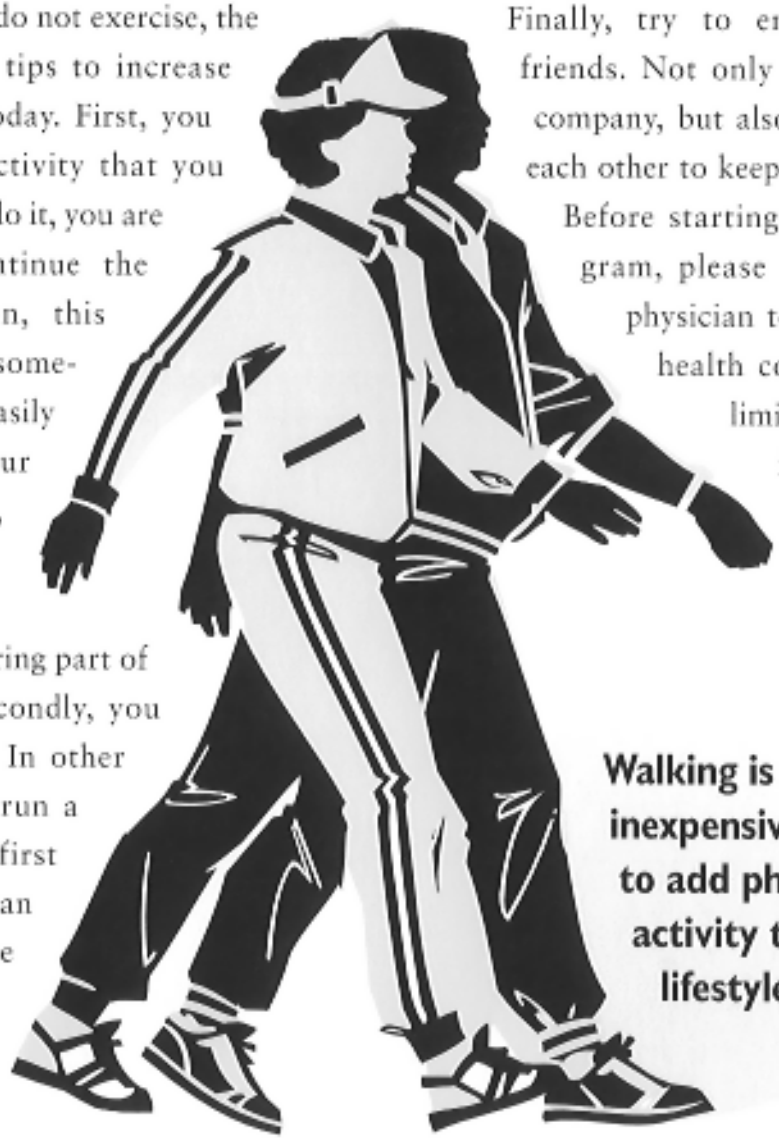
Walking only 30 minutes at a time at least three times per week can improve your health and fitness.

Wear comfortable walking shoes and loose-fitting clothing when walking.

Surgeon General's Recommendations for Physical Activity on the following page). The challenge is to increase your current level of activity. The goal should not only be to improve your fitness level, but also to lose weight and/or maintain a healthy weight.

While there are many reasons (or excuses) why people do not exercise, the following are some tips to increase your activity level today. First, you should choose an activity that you enjoy. If you want to do it, you are more likely to continue the activity. In addition, this activity should be something that you can easily incorporate into your lifestyle. For example, if you enjoy walking, take your tennis shoes to work and walk during part of your lunch hour. Secondly, you should start slowly. In other words, don't try to run a marathon on your first day of exercise. You can do 10 minutes in the morning, 10 minutes in the afternoon and 10 minutes in the evening, if you cannot carve out 30 minutes at one time.

In addition, you can add activities by changing your attitude about exercise. For example, take the stairs at work instead of the elevator, or park in a far parking space instead of driving around until a front space opens up. Finally, try to engage family and friends. Not only will they be good company, but also you can motivate each other to keep up the good work. Before starting any exercise program, please consult with your physician to discuss any prior health conditions that may limit the types of activities that you can participate in.



Walking is an inexpensive way to add physical activity to your lifestyle.

The Surgeon General's Recommendations for Physical Activity

- All people over the age of two years should accumulate at least 30 minutes of endurance-type physical activity, or at least moderate-intensity, on most—preferably all—days of the week.

- Additional health and functional benefits of physical activity can be achieved by adding more time in moderate-intensity or by substituting more vigorous activity.

- Persons with symptomatic cardiovascular disease (CVD), diabetes, or other chronic health problems who would like to increase their physical activity should be evaluated by a physician and provided an exercise program appropriate for their clinical status.

- Previously inactive women over age 50, and people at high risk for CVD should consult a physician before embarking on a program of vigorous physical activity to which they are unaccustomed.

- Strength-developing activities (resistance training) should be performed at least twice a week. At least 8–10 strength developing exercises should be performed at each session, with one or two sets of 8–12 repetitions of each exercise.

6 to 11 servings per day
- Carbohydrate energy
- Vitamins & minerals
- Dietary fiber

Breads, cereals, rice and pasta make up the Grain Group. These foods form the base of the Food Guide Pyramid, which means they should form the major portion of your diet. Six to eleven servings daily are recommended, more than for any other food group. Grains are important in your diet because they provide complex carbohydrates (starches – a major source of energy), vitamins, minerals, dietary fiber and phytochemical compounds.

Grain servings can be divided into two types: whole grain servings (which should make up most of your diet) and nonwhole grain servings (which should be limited). The term "whole grain" indicates that the entire grain seed of the plant has been ground up and used in preparing the food, thereby retaining its nutrients. On the other hand, "non-whole grain" indicates that the grain has been processed before use in the food, removing some important nutrients of the seed. Though some of these nutrients are replaced through enrichment, the fiber is lost. While African Americans meet the minimum recommended servings for grains, we found that they are doing so largely with nonwhole grain foods (Tables 4 and 5).

Whole grain foods help protect against cancer, cardiovascular disease and diabetes, yet African Americans eat 8 times more non whole grain food than whole grain foods.

Important Nutrients and Food Components

Grains provide carbohydrates (complex and simple), dietary fiber, protein, B vitamins, Vitamin E, iron, selenium, various other minerals and phytochemicals. Some of these nutrients and food components are highlighted below.

Carbohydrates and Fiber

Complex carbohydrates, so plentiful in whole grain foods, are a major source of energy. Yet grain foods become unhealthy when you add too much fat, sugars, spreads and toppings to them.

Dietary fiber is another important nutrient found in grains, vital because of its effect on possible diet-related diseases. The insoluble form of dietary fiber – the form which passes through the body's digestive system without dissolving – has long been known to relieve constipation and believed to be beneficial in reducing the incidence of colon cancer. Soluble dietary fiber, which dissolves in body fluids, may help in reducing the risk of cardiovascular disease and diabetes. Dietary fiber may also be helpful in maintaining healthy weight and reducing total food intake by increasing the feeling of fullness and satisfaction due to its bulk.

6 to eleven servings

Six to eleven servings of grains are recommended daily, the most of any of the food groups.

Keep whole grain foods low in fat by avoiding gravies, spreads and toppings.

Eat brown foods!

Add these whole grain and "brown food" alternatives to your diet:

- Brown breads such as whole wheat, 12-grain or 7-grain varieties
- Brown rice, which contains more fiber than white rice
- Whole grain cereals topped with fruit instead of sugar

How often do you eat –

- Whole wheat bread
- Brown rice
- Spaghetti tossed lightly with sauce
- Hot water cornbread NOT smothered with butter?

Vitamins and Minerals

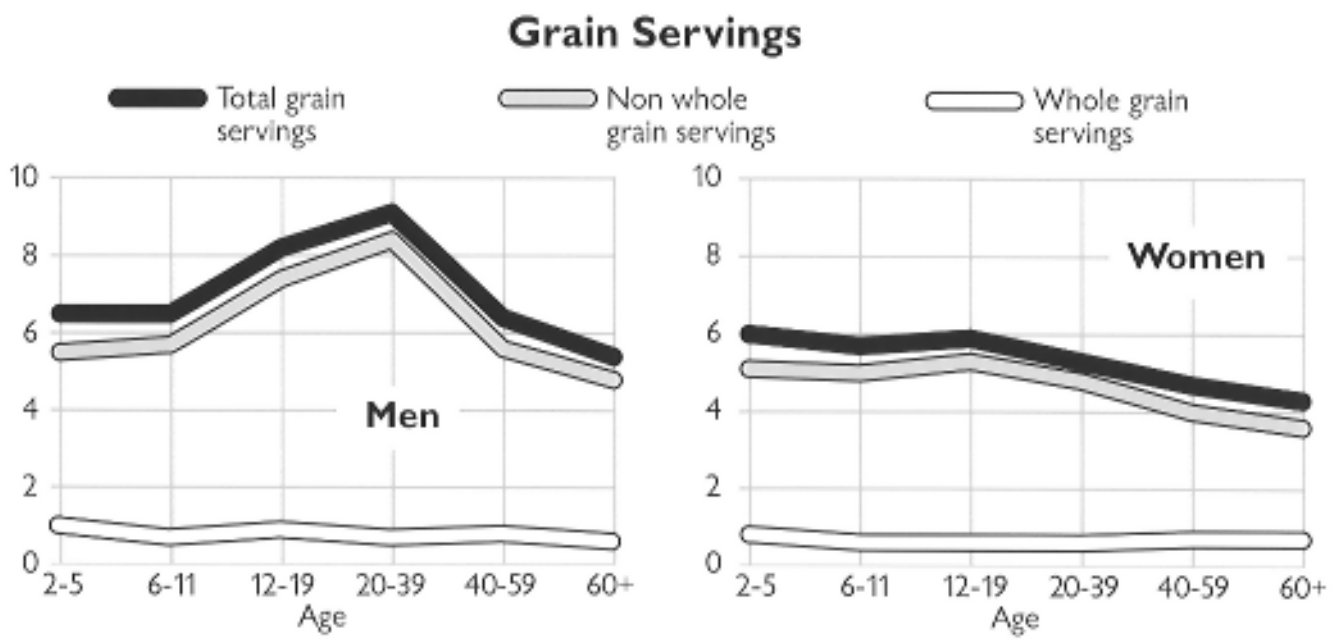
Grains provide good sources of Vitamin E and selenium. These nutrients are important because of their antioxidant or anticancer agent properties. The antioxidant Vitamin E also helps protect unsaturated fatty acids from damage by cancer causing agents. Fortified grains also are a good source of folate. (More on folate in the chapter on fruit.)

Phytochemicals

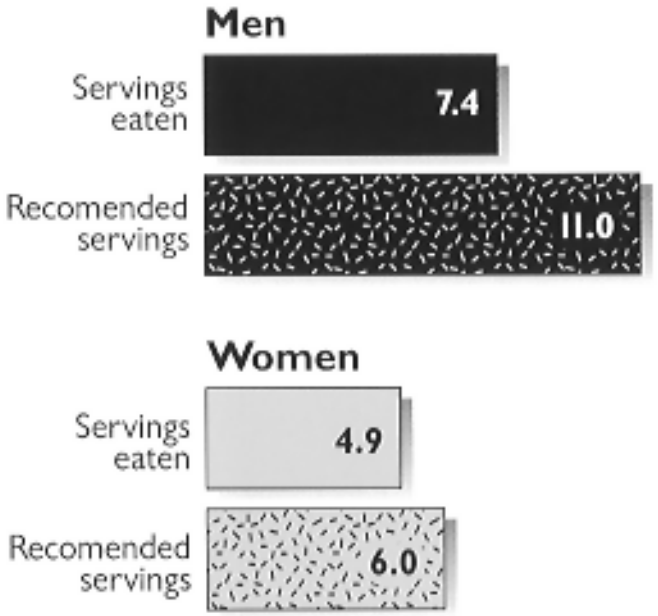
Grains contain food components that function in the body other than the major nutrients (carbohydrate, protein, fat, vitamins and minerals). Some of these compounds are called phytochemicals. Currently, ongoing research links phytochemicals to the protection against or prevention of certain chronic diseases. For example, phytoestrogens are found in grains. Phytoestrogens are believed to have protective properties and reduce the risk of cancer.

Gender and Age

Forty-one percent of all African Americans age 2 and over consume the minimum recommended number of six servings of grains a day. But this number masks the fact that African American women, on average, eat far fewer grain servings than men. While 53% of males age 20 and over meet the minimum servings recommended, only 26% of adult



Total Grain Consumption



women meet the recommendation. On average, males age 20 and over eat about 7.4 servings of grain products a day. Women in this age group eat only 4.9 servings, a low intake level for women of all ages.

Furthermore, it appears that as African American women grow older, they eat less grain. Girls ages 2–5 eat the most grain (6.0 servings a day). That number decreases to 4.3 servings for women 60 and over. For men, grain servings eaten at different life stages form a bell curve where 9.1 servings a day for males age 20–39 are at the top. Only males age 60 and older, who eat 5.4 servings a day, fail to meet the recommended minimum of six grain servings a day. [See chart on page 40]

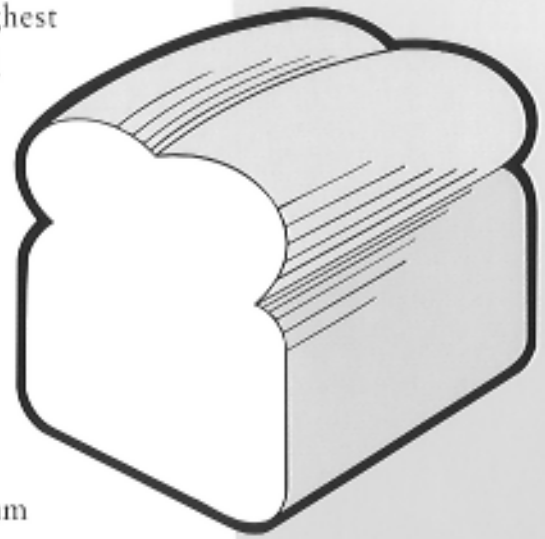
For African Americans at all ages, a majority of daily grain servings comes from nonwhole grain servings. While everyone eats an average of 6.2 servings of total grain products, 5.5 servings come from nonwhole grains. Only 0.7 servings come from whole grains.

Annual Income and Food Stamp Use

Annual income appears to have little effect on the intake of grain products. Only 40% of those at the higher income level consume at least the recommended 6 grain servings a day, whereas, 45% of those at or below the poverty level meet the recommendation (Tables 6, 7). Those at the highest income level eat about 6.0 total grain servings, those at the middle income level eat 5.7 servings, and those at the lowest level, on average, eat 6.8 servings daily. Food stamp use also does not seem to affect grain intake. Forty-one per-cent of those who do not use food stamps meet the minimum recommendation, while 44.5% of those who use food stamps do the same.

African American men eat far more grain servings than do women. Only men age 60 and older fail to meet the recommended minimum.

Whole grain breads and cereals, rice and pasta are good sources of complex carbohydrates and dietary fiber.



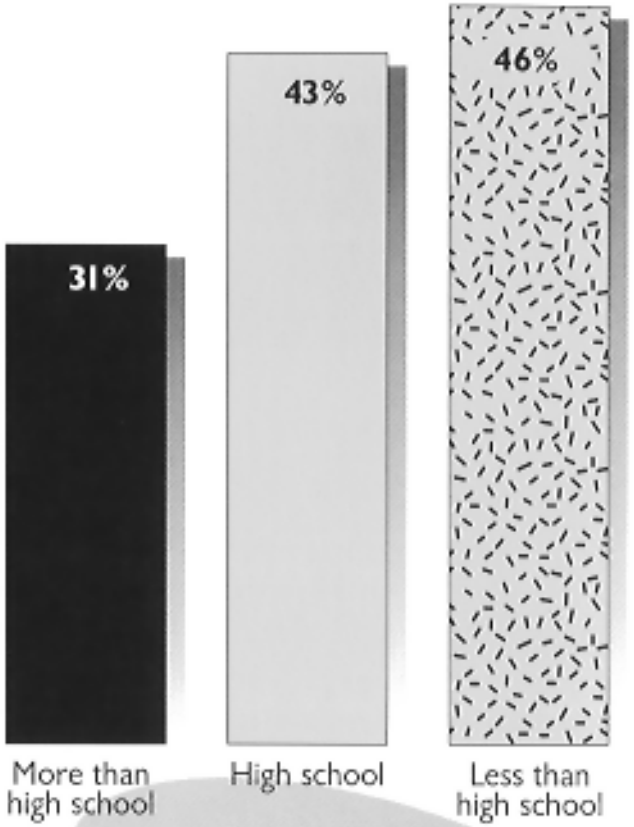
Are you grain smart?

There appears to be an inverse relationship between education level and whether African Americans meet the minimum recommendation – the more education, the fewer grain servings eaten!

Grain foods become less healthy when you add too much butter, oils, sugar or sauces to them.

Education

Education levels yielded interesting findings for grain consumption. The belief that higher education leads to healthier eating habits does not necessarily hold true for African Americans. We found that 46% of those who have less than a high school education and 43% of those who have no more than a high school education meet the minimum recommendation of 6 grain servings a day compared to only 31% of those with education beyond high school. There appears to be an inverse relationship between education level and whether African Americans meet the minimum recommendation – the more education, the fewer grain servings eaten.



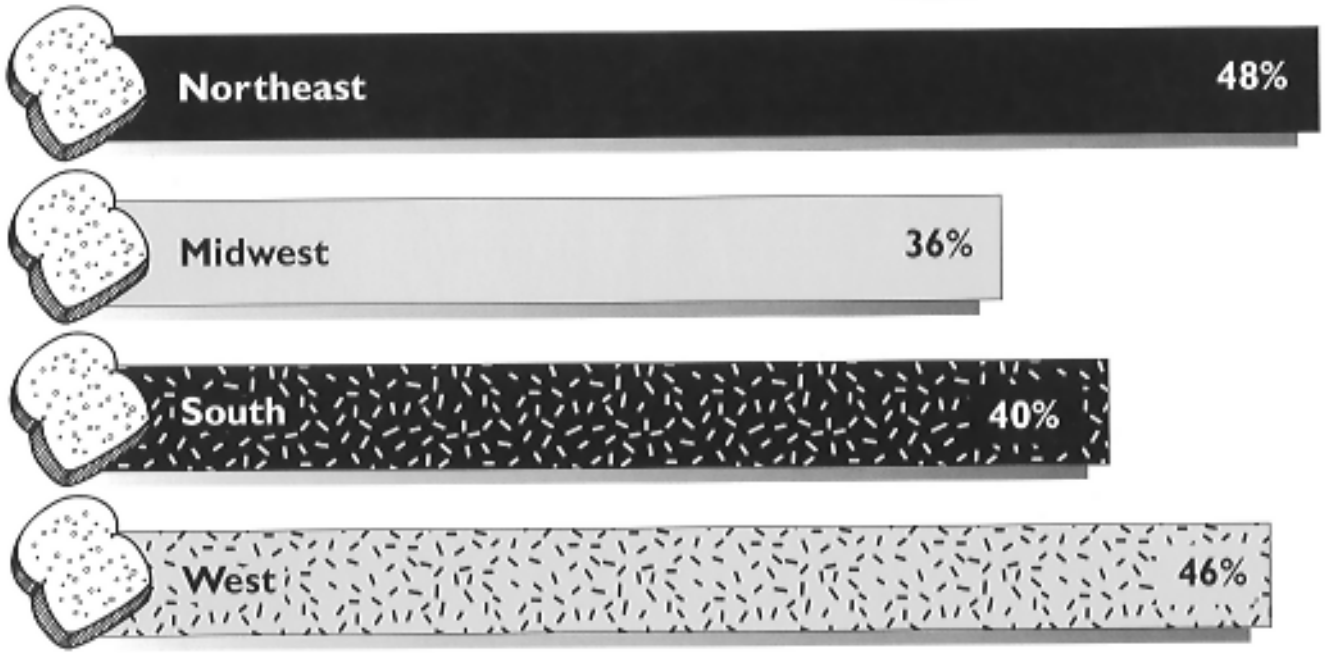
Percentage of African Americans eating at least 6 grain servings

Region and Urbanization

Geographical location, on the other hand, highlights other differences in daily grain intake. Nearly half of the African Americans (48%) in the Northeast meet the minimum recommendation for grains, with an average of 7.4 servings per day. In the Midwest, only 36% meet the minimum recommendation, averaging 5.9 total grain servings a day. In the West, only 46% consumed 6.4 servings of grains. In the South, where half of all African Americans reside, the average daily intake is 5.8 servings with only 40% meeting the Food Guide Pyramid recommendation.

Degree of urbanization – city dwellers compared to those living in suburban or rural areas – does not provide such clear differences. Forty-two percent of those in central cities (6.4 servings) and suburbs (5.9 servings) meet the minimum daily recommendation for grains. African Americans in rural areas have the lowest daily grain consumption, with 5.5 servings a day.

Less than half of African Americans nationwide are eating the minimum recommendation for grains.



Percent of African Americans meeting grain recommendation

Grains!
Grains!
Grains!

Which are your favorites?

Cornbread
Spaghetti
Brown rice
Barley
Couscous
Oatmeal
Rye bread
Pumpernickel bread
12-grain bread
Whole grain cereals
Grits
Cream of wheat
Whole wheat bread
Farina
Bulgar

The "Whole" Story

Whole grain foods contain more nutrients and fiber because the entire grain seed – including the germ (inside) and the bran (outside) – is used to prepare them. This is why whole grain foods often retain some of their brown or golden color. When grains are processed or refined to make white bread or other non wholegrain foods, many of the nutrients are lost. Though some of these nutrients are replaced through enrichment, the fiber is not.

Moral:
Eat more varieties of grain foods.

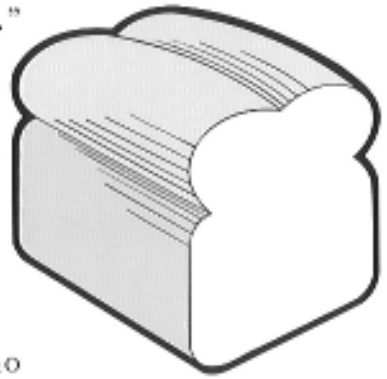
Eat more whole grain than non wholegrain foods.

Body Mass Index (BMI)

Those persons with a BMI of less than 25 consume more total grain products than those with a BMI 25 or above (6.5 servings to 5.9 servings). Forty-eight percent of those at a healthy weight (BMI less than 25) meet the minimum recommendation for grain as compared to the 36% of those at a less healthy weight (BMI greater than or equal to 25). This is a surprising finding in light of the common misconception that eating grain foods such as breads and pasta promotes weight gain. Rather, this finding indicates that African Americans may have nutritionally dense diets composed of high grain intake and low calories.

Knowledge, Attitudes and Behavior

When African Americans 20 years and older are asked about the importance of choosing a diet with plenty of breads, cereals, rice and pasta, we begin to see a curious connection between actual knowledge, attitudes and behavior. Overall, 65% of African American men and 58% of women believe that grains are "very important" or "somewhat important" in diet. Overall, 61% of African Americans, regardless of gender, believe that grains are "very important" or "somewhat important" (Tables 8, 9). In addition, only about one third (30%) believe that grains are "not too important." However, this contrast is much less dramatic when observed within various categories. For example, among Southerners, middle income earners, high school graduates and rural residents, those who feel grains are "very important" or "somewhat important" almost equal those who believe grains are "not too important."



Conclusion

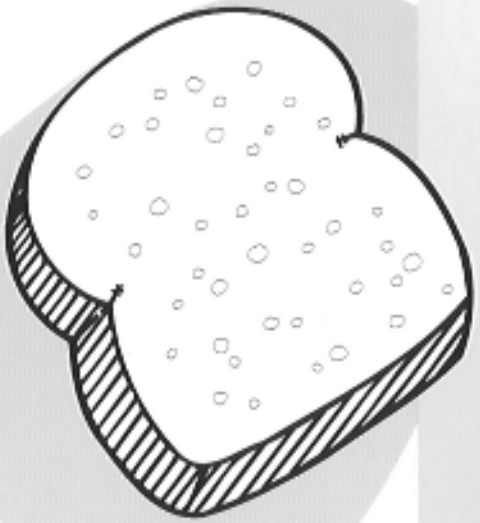
Many African Americans meet the minimum recommendation of 6 total grain servings a day. However, a large percentage of the grain servings eaten are from nonwhole grain foods rather than more nutritionally beneficial whole grain foods. One of the objectives of the Healthy People 2010 Initiative is to increase to at least 80% the proportion of people age 2 and older who meet the U. S. Dietary Guidelines' minimum average goal of at least 6 servings of grains per day. African Americans are almost half way there with 41% meeting this minimum according to the USDA Food Survey. In order to increase this number, the message for grain consumption is clear and twofold: 1) African Americans need to eat more grain foods. Grains are important because they provide much needed carbohydrates (for energy), have less calories than fat, and provide fiber, a very important part of the diet for reducing the incidence of diet-related diseases and obesity, and 2) African Americans should eat more whole grain foods than nonwhole grain foods. Whole grains provide more complex carbohydrates and fiber and less fat and calories.

The Healthy People 2010 Initiative seeks to increase to at least 80% the proportion of people age 2 and older who meet the U. S. Dietary Guidelines' minimum average goal of at least 6 servings of grains per day. African Americans need to increase their consumption of grains overall, especially foods made from whole grains.

80%
Healthy People 2010 Goal

Percentage of African Americans eating at least 6 grain servings

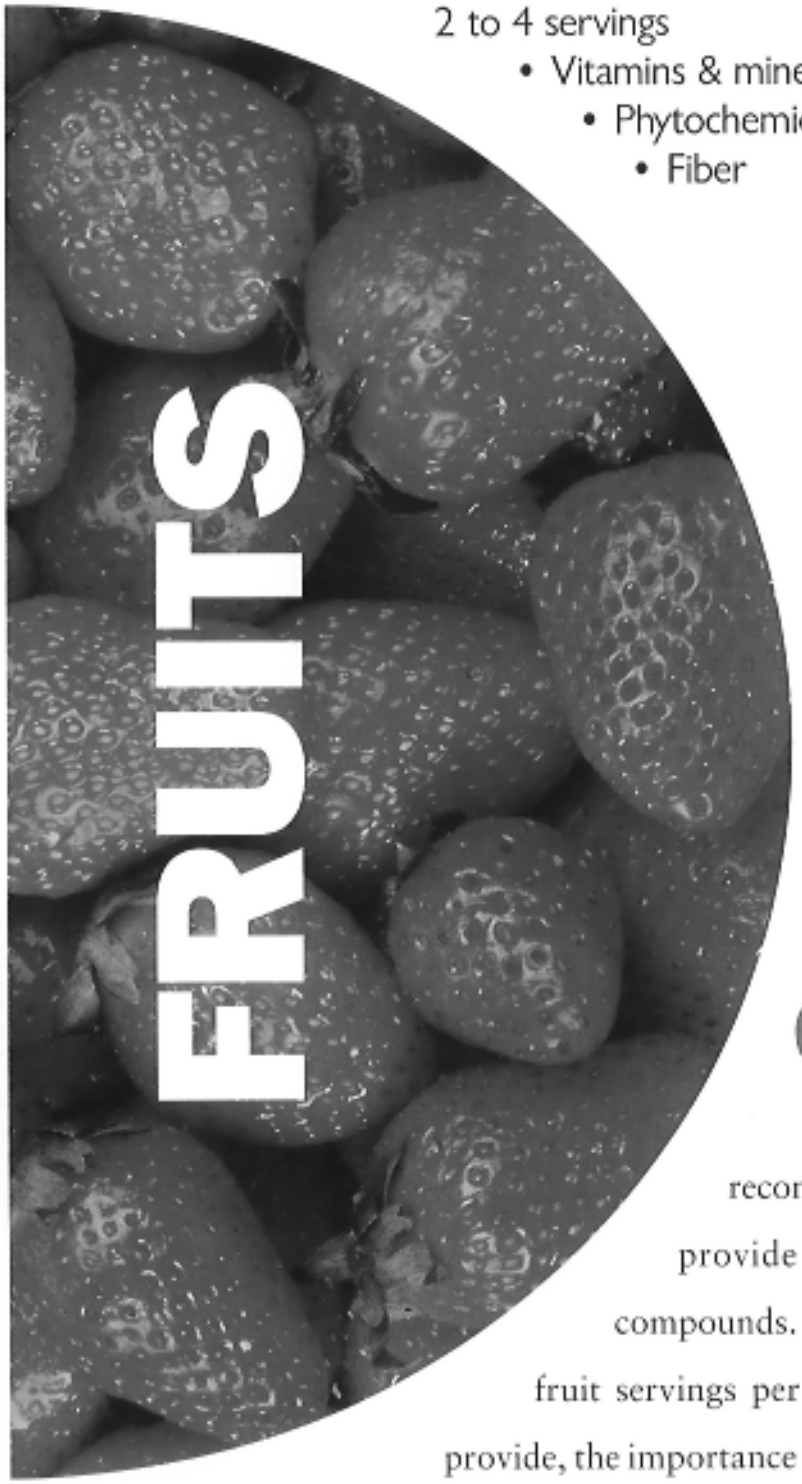
41%
African Americans met goal in 1996



The Bottom Line

Eat more varieties of grain foods.

Eat more whole grain than non wholegrain foods.



2 to 4 servings
- Vitamins & minerals
- Phytochemicals
- Fiber

The Fruit Group follows grains as we move up the Food Guide Pyramid. Two to four servings of fruit are recommended to be eaten each day. Fruits are important because they provide good sources of vitamins, minerals, fiber and phytochemical compounds. African Americans barely attain the recommended minimum of 2 fruit servings per day. Due to the essential nutrients, color, taste and variety they provide, the importance of eating fruit can not be over emphasized.

Fruit servings can be divided into two categories: "citrus, melons, berries" and "other fruits." "Total fruits" is the combination of these two categories. Examples of "citrus, melon, berries" are blueberries, cantaloupe, casaba melon, grapefruit, kiwi fruit, lemons, limes, oranges, pineapple, strawberries, tangerines, watermelon and the juices from these fruits. These fruits are your primary sources of Vitamin C. "Other fruits" include apples, apricots, bananas, cherries, figs, grapes, mangos, nectarines, papaya, peaches, pears, plantain, plums, raisins, and their juices.

Important Nutrients and Food Components

Vitamins and Minerals

Vitamin C is important because of its role in healing wounds, fractures, bruises and preventing bleeding gums. It also reduces susceptibility to infections. Ongoing research shows that Vitamin C also helps reduce the severity of symptoms from the common cold. Good sources of Vitamin C are citrus (oranges, grapefruit, lemons), melons, guava, strawberries, pineapple and kiwi fruits.

Potassium is necessary to keep your internal body parts running smoothly and is involved in maintaining water balance and regulating nerve and muscle functions. Potassium also promotes cell growth and an adequate supply is essential for muscle formation. For most healthy individuals, potassium deficiency is unlikely since potassium is found in a wide range of foods. Although 1.6 to 2 grams of potassium are recommended daily, you should try to get a bit more due to its possible protective effect against hypertension, a prevalent problem in the African American community. Bananas and fruit juices are good sources of potassium. Vitamin A, also known as retinol, is a fat-soluble vitamin (can be absorbed in fat), that plays an important role in vision, growth, bone development and normal reproduction. Good food sources of Vitamin A are cantaloupe, mango, papaya, apricots, peaches and nectarines.

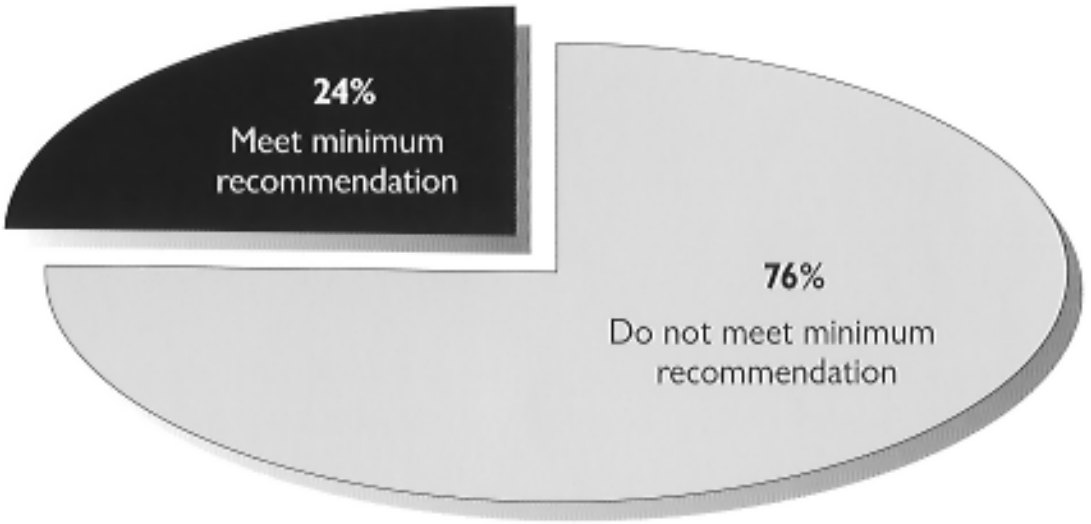
Folate is important for DNA metabolism. Folate deficiency can lead to poor growth, problems in nerve function and neural tube defects during pregnancy. Orange juice is a major source of folate.

Phytochemicals

Prominent food components (phytochemicals) found in fruit and vegetables are called flavonoids. Currently, ongoing research identifies over 2,000 individual flavonoids. These compounds act as antioxidants or anti-

Two to four servings of fruit are recommended daily as good sources of vitamins, minerals, fiber and phytochemicals.

76% of African Americans age 2 and older eat fewer than 2 servings of fruit per day, the Food Guide Pyramid minimum recommended amount.



Percentage of African Americans age 2 and over meeting fruit recommendation

cancer agents by preventing the alteration of DNA. Research suggests that eating fruit and vegetables may reduce your risk of cancers of the colon, stomach, esophagus and mouth. Flavonoids also may protect against heart disease.

Gender and Age

While 2–4 fruit servings are recommended daily, African Americans 2 years of age and older consume, on average, only 1.4 servings daily (Table 10). Only 24% of these individuals meet the minimum recommendation (Table 11). Fruit consumption is low for both men (1.4 servings) and women (1.3 servings). Unlike consumption of other food groups, which varies with age, fruit consumption remains low from infancy through adulthood.

Average number of fruit servings eaten

Annual Income & Food Stamp Use

African Americans at higher income levels appear to consume more fruit than those at other income levels (Table 12). About a third (34%) of those in the highest income group meet the minimum of 2 servings of fruit a day, while less than a third in middle (23%) and lower (20%) income groups do so. Higher income African Americans consume 1.7 total fruit servings, compared to middle income earners who consume 1.4 servings and those with lower incomes who consume 1.2 servings (Table 13). Twenty percent of those African Americans using food stamps, compared to 26% of those who do not use food stamps, meet the minimum recommendation. Although those with higher incomes may consume more fruits daily, for all income levels, 50% or more of African Americans consume less than one serving of fruit a day.

Less than 50% of all African Americans – regardless of income – consume the recommended fruit servings a day. What is your "fruit quotient"?

Percent of African Americans meeting fruit recommendation

Percent of African Americans meeting fruit recommendation

Average number of fruit servings eaten

Eat more fruit!

Increase your fruit consumption in these simple ways:

Try new fruits. New varieties of fruits show up regularly in grocery stores. Try some!

Take a fruit break - eat a fruit salad for lunch, or fresh or canned fruit in natural juices as a snack. Fresh fruit make excellent after dinner desserts.

Choose 100% juice. Fruit "ades" and fruit "drinks" often contain little fruit juice and lots of added sugar. Check the ingredients before you buy!

African Americans at all education levels eat less than the recommended 2 servings of fruit per day. Are you eating "fruit smart"?

Vitamins! Minerals!

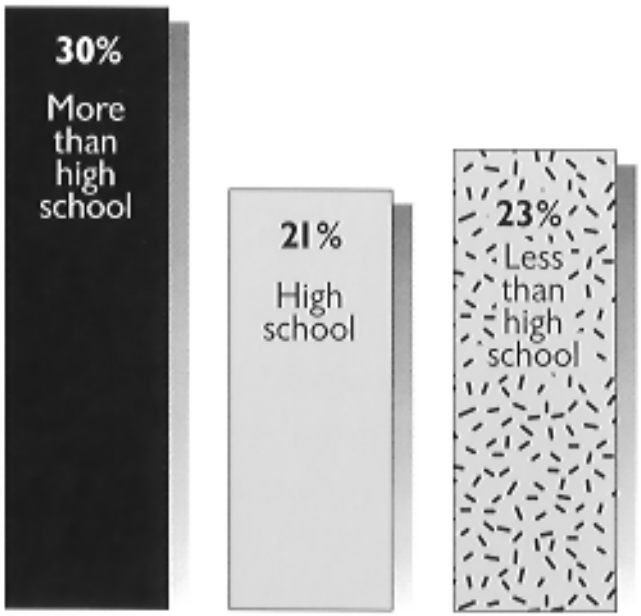
Citrus fruits, melons, and strawberries are good sources of Vitamin C. Bananas and fruit juices provide potassium. Orange juice is a major source of folate.

Eat cantaloupe, mango, peaches and nectarines for Vitamin A.

Education

As with income, there is a positive correlation between education level and daily fruit consumption. Thirty percent of African Americans with higher education meet the recommendation, compared to 23% with less than a high school education. And although those with a higher education are closer to meeting the minimum recommendation, for all education levels, average intake is below 2 fruit servings a day. For those with education above high school, total fruit consumption averages 1.7 servings per day. For those with less than a high school degree, the average total fruit consumption is 1.3 servings.

Average number of fruit servings eaten

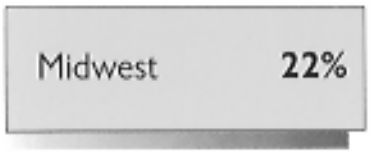


Percent of African Americans meeting fruit recommendation

Region and Urbanization

Accessibility may play a role in fruit consumption. African Americans living in suburban areas meet the minimum recommended intake of fruit at the highest percentage (27%), followed by 24% of central city dwellers and 18% of rural residents. This finding may point to a better quality and greater abundance of fruit in supermarkets in suburban neighborhoods than in central cities and rural areas. Similarly, while 39% of Northeasterners meet the minimum recommendation, the number decreases for Midwesterners (22%), Westerners (21%) and Southerners (19%). Nonetheless, average daily consumption for all regions and degrees of urbanization is less than 2 servings, with Northeastern African Americans consuming the highest at 1.9 total fruit servings a day.

African Americans living in the suburbs may have better access to fruit in abundance and variety. They eat more fruit than other groups. Also, those living in the Northeast meet the daily recommendation more often than most.



Percent of African Americans meeting fruit recommendation

Percent of African Americans meeting fruit recommendation

In season or out of season?

Good fruit choices are available throughout the year in most areas. Look for these perennial favorites and add some of your own for a varied selection.

Oranges
Pears
Apples
Lemons
Grapefruit
Bananas

Have you had your fruit today?

Did you know?

The flavonoids in fruits may reduce your risk of cancer and protect against heart disease.

Folate deficiency can lead to defects in a baby's development during pregnancy.

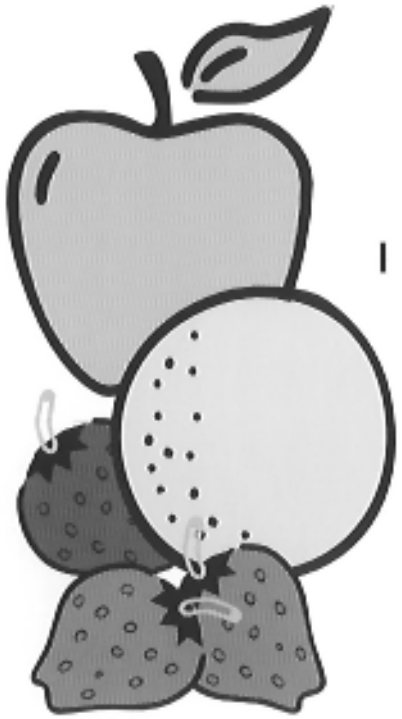
Orange juice is a good source of folate, an important vitamin for women of child-bearing age

Body Mass Index (BMI)

Little difference shows up in the daily fruit consumption of those with a BMI above or below 25. Of African Americans at a healthy weight, BMI less than 25, 25% consume at least the minimum of 2 servings of fruit a day. Of those at less healthy weights, BMI of 25 or greater, 24% consume the minimum. This translates to an average intake of 1.3 total fruit servings daily for those at healthy weights and 1.4 daily servings for those at unhealthy body weights.

Average number of fruit servings eaten

Percent of African Americans meeting fruit recommendation



An Apple A Day?

Try at least two of these single fruit servings:

1 medium apple, banana, or orange

1 medium peach

1 kiwi fruit

1/2 grapefruit

1 cup fresh berries

6 oz. unsweetened 100% juice

Knowledge, Attitudes and Behavior

When African Americans age 20 years and older are asked about the importance of choosing a diet with plenty of fruits and vegetables, we, again, observe a conflicting connection between actual knowledge, attitudes, and behavior. More than half (66%) believe that the recommendation to eat more fruit is "very important," but attitude and knowledge do not appear to match their actual eating behavior (Table 8, 14).

Conclusion

African Americans do not eat enough fruit. Several factors may affect this finding. For those with higher incomes, fresh fruit may be easier to find and purchase – an assumption partially supported by the finding that those in suburban areas eat more fruit than those in other areas. Income and location, which can affect accessibility, may be factors contributing to these differences. Even so, public health messages should encourage African Americans to consume more fruit.

African Americans believe that eating fruit is very important, but we eat very little. The bottom line with fruit is to

eat like you know it!

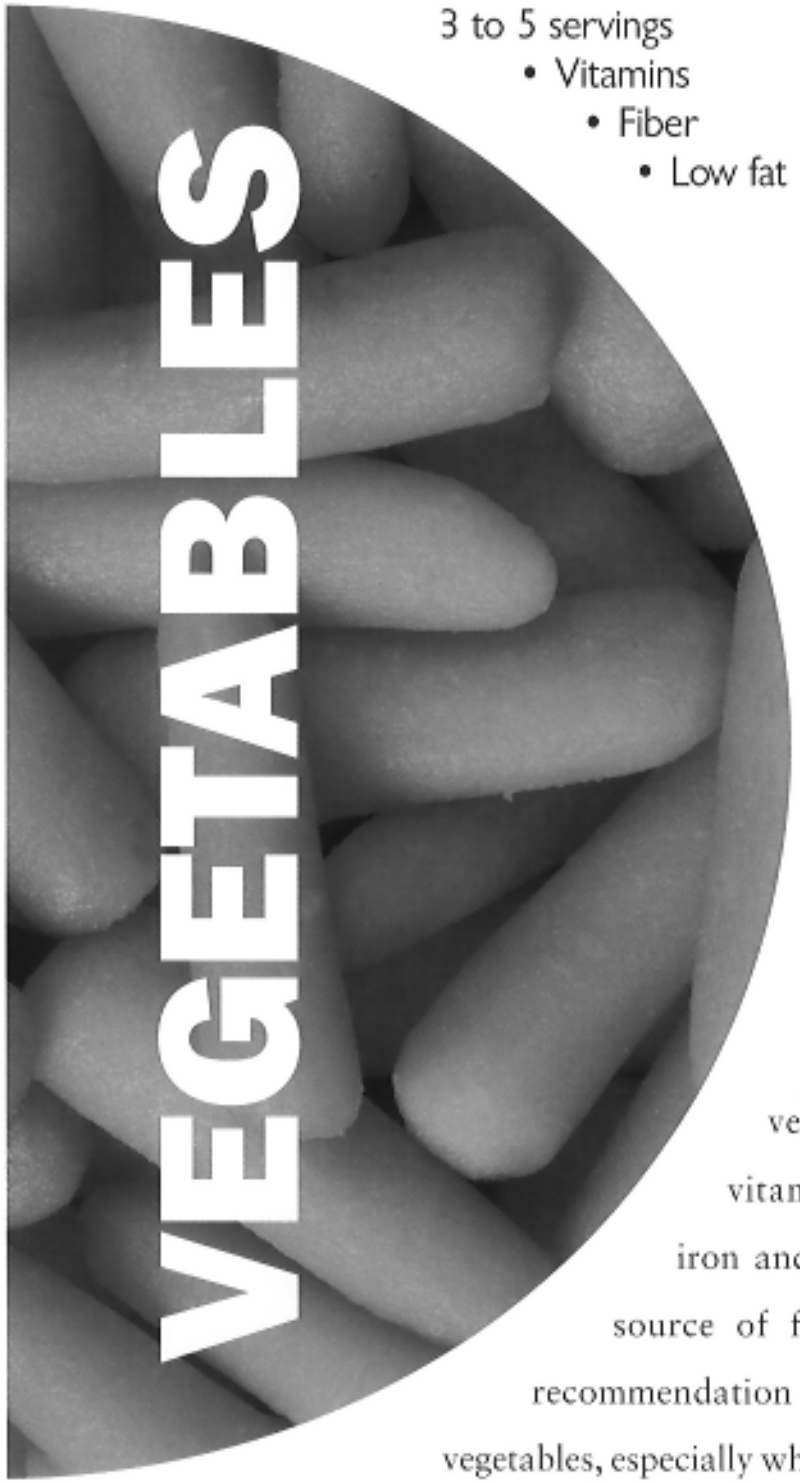
Fruit or not fruit?

Some vegetables are really fruit in disguise. Fruits generally have seeds inside them, while vegetables usually don't. So the next time you slice into a ripe tomato, squash, cucumber or eggplant, you may wonder, is it fruit or vegetable?

The Bottom Line

Eat more fruit

Drink 100% fruit juices



3 to 5 servings
- Vitamins
- Fiber
- Low fat

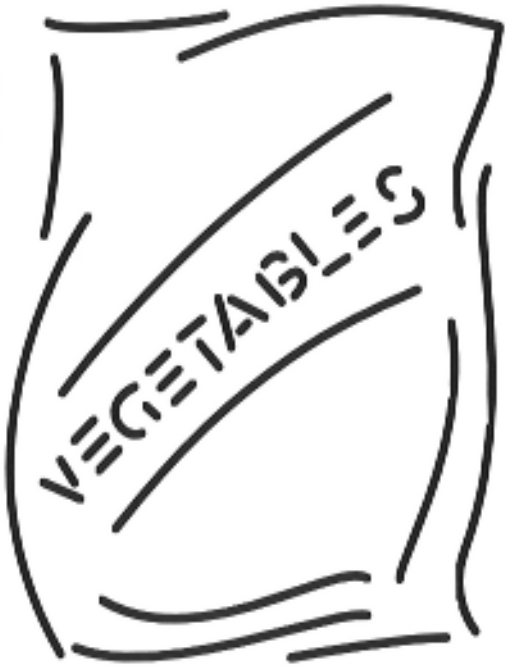
Next to the Fruit Group, is the Vegetable Group. The Food Guide Pyramid suggests 3 to 5 servings of vegetables a day. Vegetables are important because they provide vitamins, including Vitamins A, C and folate; minerals, including iron and magnesium; protein and phytochemicals. They also are a good source of fiber and low in fat. African Americans appear to meet the recommendation for eating vegetables, however, we do so primarily with starchy vegetables, especially white potatoes.

Healthy vegetable consumption includes eating dark green leafy vegetables, deep yellow vegetables, beans, tomatoes, starchy vegetables, and many others. A minimum of 3 vegetable servings is recommended per day.

Important Nutrients and Food Components

Dietary Fiber

Dietary fiber, found in vegetables and other foods, aids the body's digestive system, helps reduce cardiovascular disease and diabetes and promotes healthy weight maintenance (see the section on Grains).



Protein

Vegetable sources of protein come from dry beans and peas (pinto beans, black-eyed peas, lima, kidney, red and black beans). However, the protein in beans lacks specific amino acids and is best eaten with rice, corn, other grains, meat, eggs or cheese to make a complete protein. We discuss protein in greater detail in the Meat chapter.

It is also interesting to note that beans are placed with meat on the Food Guide Pyramid. We've included them with Vegetables because many people view them traditionally as vegetables that also serve as meat alternatives.

Vitamins and Minerals

The healing properties of Vitamin C, discussed in the previous section on fruit, also pertain to vegetables such as tomatoes, peppers, dark leafy greens, raw cabbage and potatoes.

Vitamin A, discussed in greater detail in the Fruit chapter, can be found in dark green leafy vegetables and red, orange and yellow vegetables. Folate was discussed in the previous chapter on fruit. However, good sources of folate from vegetables are spinach, romaine lettuce, turnip greens, asparagus, broccoli and beets.

Iron protects against iron deficiency anemia, the most common nutritional deficiency in the U.S., especially among women and children. If not corrected, iron deficiency anemia can result in cognitive and physical dysfunctions.

3 to five servings

Three to five servings of vegetables are recommended daily to get all the nutrients your body needs from these sources.

Gender and Age

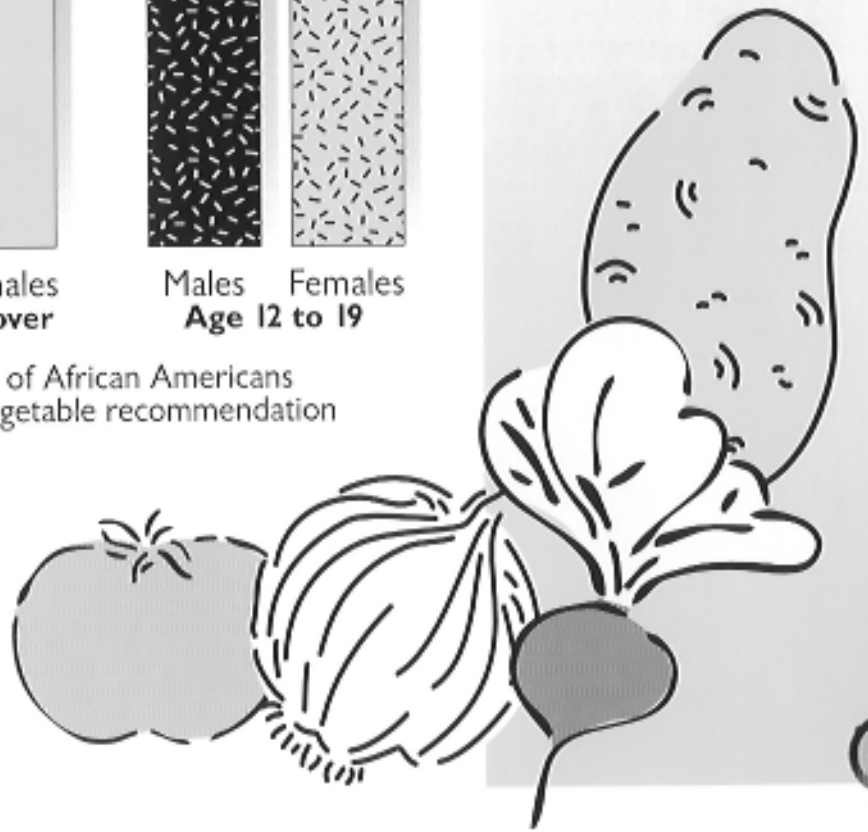
Forty-two percent of all African Americans 2 years of age and older eat at least three servings of vegetables a day (Table 15). On average, African Americans eat about 1.1 servings of white potatoes, 0.4 servings of tomatoes, 0.2 or fewer servings of dark green leafy vegetables, deep yellow vegetables, and other starchy vegetables, and 0.8 servings of all other vegetables (Table 16). More than 55% of African American men and almost 38% of African American women 20 years of age and older meet the minimum recommendation for total vegetable intake. Except for girls 2–5 years old, of whom 31% eat at least 3 vegetable servings a day, less than 30% of children age 2–11 meet the recommendation. Thirty-eight percent of 12–19 year old girls meet the recommendation, compared to 56% of boys the same age.

More than half of African American men and boys meet the daily recommendation for vegetable servings while only 38 % of women and girls do.

Percent of African Americans meeting vegetable recommendation

Tomatoes, peppers, dark leafy greens, raw cabbage and potatoes are rich in vitamin C.

Spinach, romaine lettuce, turnip greens, asparagus, broccoli and beets are good sources of folate.



Eating in the Fast Lane?

Choose a healthy alternative!

Order a baked potato rather than french fries. Avoid high fat toppings such as cheese, mayonnaise, bacon, butter or special sauces.

Order a smaller or lower-fat burger. Or choose grilled chicken or fish with lettuce and tomato.

Order a salad with lowfat dressing.

Order a "veggie" pizza topped with peppers, mushrooms, onions and tomatoes.

Annual Income and Food Stamp Use

Income levels reveal a noticeable relationship to vegetable intake. More African Americans with higher (46%) and middle incomes (44%) meet the minimum recommendation of 3 servings of vegetables a day than those with lower incomes (38%). Similarly, 45% of those who do not use food stamps meet the recommendation, compared to 34% of those who do use them. It is important to note that the vegetable consumed most frequently in all income groups is also the white potato (Table 17, 18). These findings might reflect a higher costs of vegetables (fresh and otherwise) and the degree of access to them found in stores frequented by many African Americans.

African Americans with higher and middle incomes eat more vegetables. White potatoes are eaten most frequently by all.

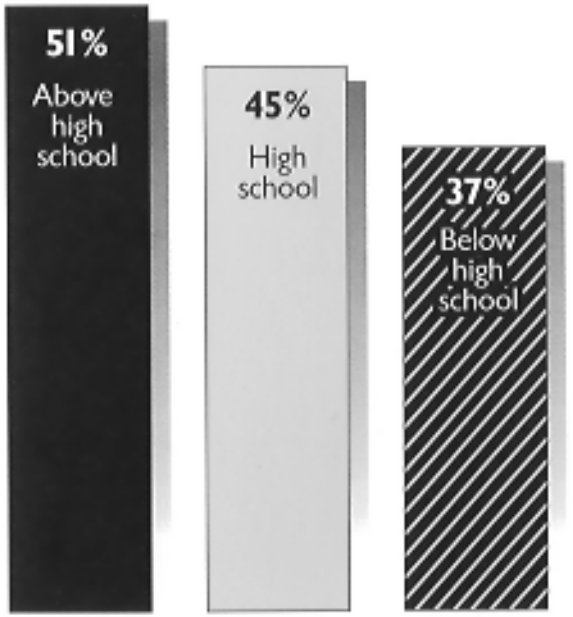
Percent of African Americans meeting vegetable recommendation

Percent of African Americans meeting vegetable recommendation

Education

Higher education also appears to be related to a higher consumption of vegetables. About 51% of African Americans with education beyond high school (3.5 servings) and 45% of those with no more than a high school education (3.2 servings) meet – and slightly surpass – the recommended servings, compared to 37% of those with less than a high school education (2.8 servings).

Average number of vegetable servings



Percent of African Americans meeting vegetable recommendation

Serve Yourself

A single serving of vegetables contains about 25 calories and 5 grams of carbohydrate. Choose combinations of these and other vegetables to reach the number of daily servings right for you

- 1/2 cup cooked carrots, broccoli, zucchini, cabbage, turnips, etc.
- 1 cup raw vegetables or salad greens.
- 3/4 cup vegetable juice

Did you know?

Although dried beans are often thought of as vegetables, they are included in the Meat Group on the Food Guide Pyramid due to their high protein content.

Fewer than half of all African Americans meet the minimum recommended servings for vegetables. Increase your vegetable intake:

- Plan meals to include more than one vegetable dish
- Prepare at least one "veggie" dinner per week
- Drink vegetable juice instead of sugary drinks.

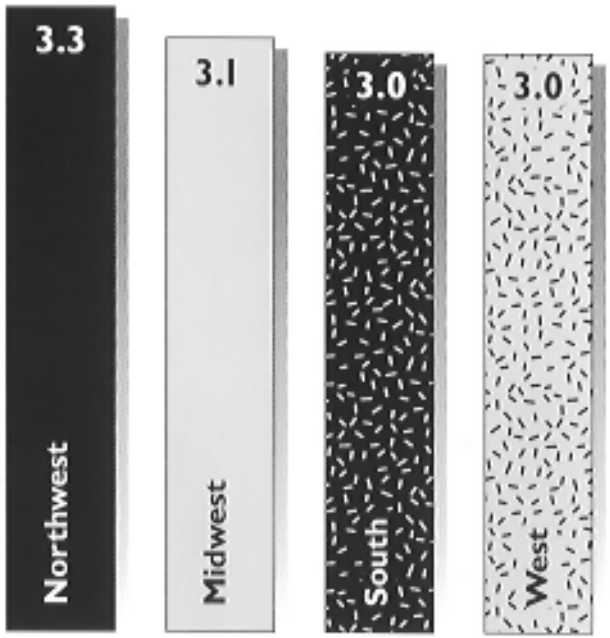
Region and Urbanization

African Americans who reside in the Northeast, on average, eat slightly more vegetables (3.3 servings) than those in the Midwest (3.1 servings), West (3.0 servings) or South (3.0 servings). However, no matter in which part of the country African Americans reside, fewer than half meet the minimum recommended consumption for vegetables. Also, while 44% of central city dwellers and 43% of suburbanites meet the recommendation, only 31% of rural residents do so.

Body Mass Index (BMI)

It is interesting to note that BMI does not appear to be related to vegetable consumption. African Americans at unhealthy weights, with a BMI equal to or greater than 25, eat a minimum of 3 vegetable servings a day (44%), compared to those at healthy weight levels (BMI less than 25), who consume less than the recommended minimum. This finding may lend support to the argument that for many overweight people, lower physical activity rates, and not higher food consumption, lead to the extra pounds.

Percent of African Americans meeting vegetable recommendation



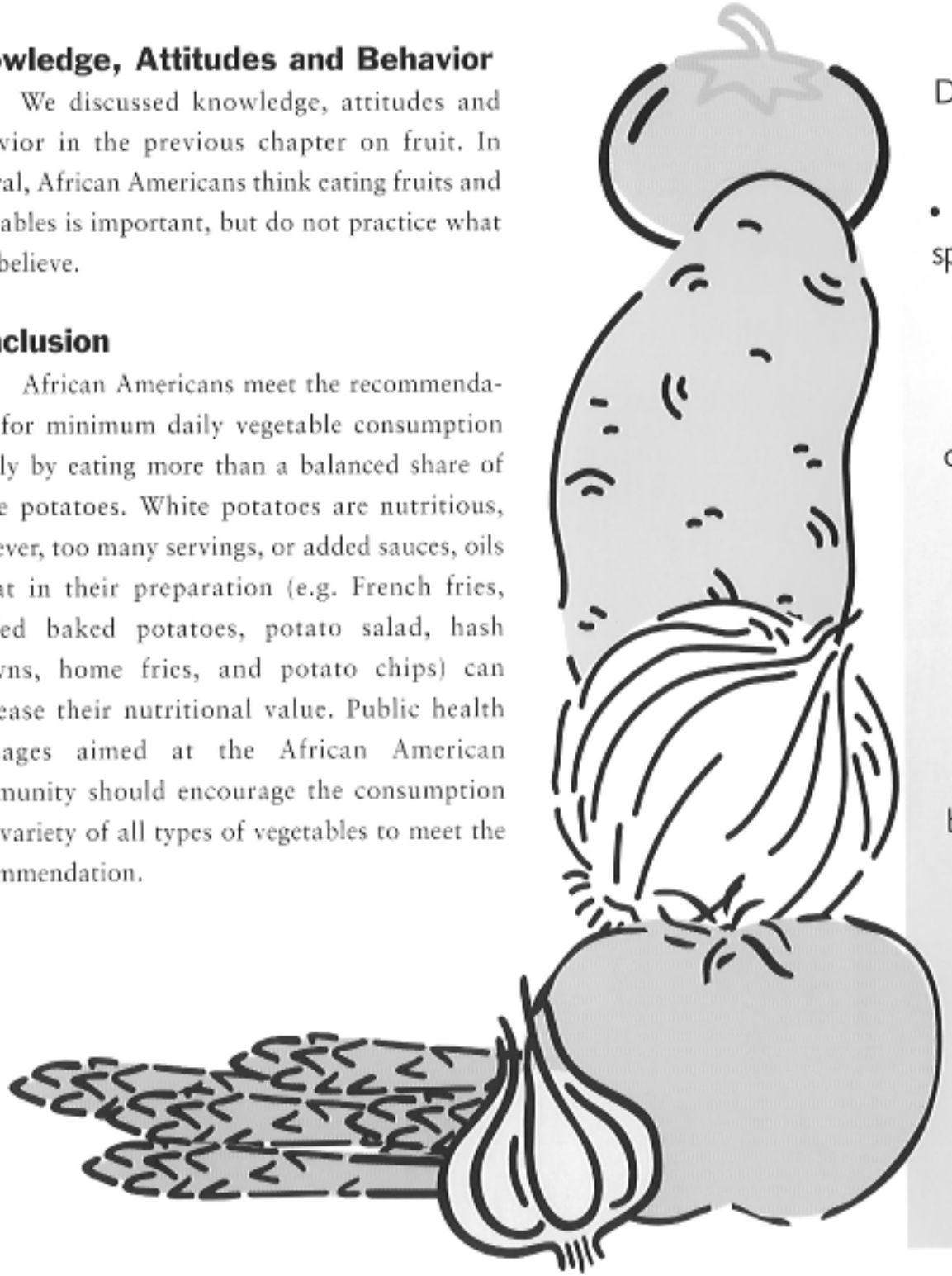
Average number of vegetable servings

Knowledge, Attitudes and Behavior

We discussed knowledge, attitudes and behavior in the previous chapter on fruit. In general, African Americans think eating fruits and vegetables is important, but do not practice what they believe.

Conclusion

African Americans meet the recommendation for minimum daily vegetable consumption largely by eating more than a balanced share of white potatoes. White potatoes are nutritious, however, too many servings, or added sauces, oils or fat in their preparation (e.g. French fries, stuffed baked potatoes, potato salad, hash browns, home fries, and potato chips) can decrease their nutritional value. Public health messages aimed at the African American community should encourage the consumption of a variety of all types of vegetables to meet the recommendation.



Vegetable Variety

Different types of vegetables provide different nutrients. Eat a variety.

- Dark-green, leafy vegetables such as spinach, romaine lettuce and broccoli are good sources of vitamins and minerals, including iron.

- Deep-yellow vegetables include carrots and sweet potatoes and are important sources of vitamin A and other nutrients.

- Starchy vegetables such as potatoes, corn and peas supply essential carbohydrates.

- Lettuce, tomatoes, onions, green beans and other vegetables provide a variety of vitamins, minerals and phytochemicals.

The Bottom Line

Eat a variety of vegetables

Drink vegetable juices

DAIRY

2 to 4 servings per day

- Calcium
- Protein
- Vitamins & minerals

Near the top of the Pyramid is the Dairy Group. Most dairy foods can be eaten in the form of whole, low fat and fat free, or skim products. Two to four servings of dairy foods are recommended each day. Dairy foods are important to a healthy diet because they are a major source of protein, vitamins and minerals. Some of the best sources of calcium are dairy foods.

Dairy foods are divided into three major categories: milk, yogurt and cheese, including natural hard and soft cheeses, cottage cheese, cream cheese, processed cheese and cheese spreads. Because of their fat content, butter, nondairy sweet cream and sour cream substitutes are grouped as fats and oils on the Food Guide Pyramid.

Important Nutrient:

Calcium

Calcium is the most abundant mineral in the body. It makes up 1.5% to 2% of your body weight and 39% of your body's minerals. Ninety-nine percent of the calcium in your body is found in bone and teeth. Inadequate dietary calcium intake can result in weaker bones, especially during periods of growth for children and postmenopausal for women. African Americans do not meet the daily recommended intake of dairy foods. As a result, our calcium intake also is low.

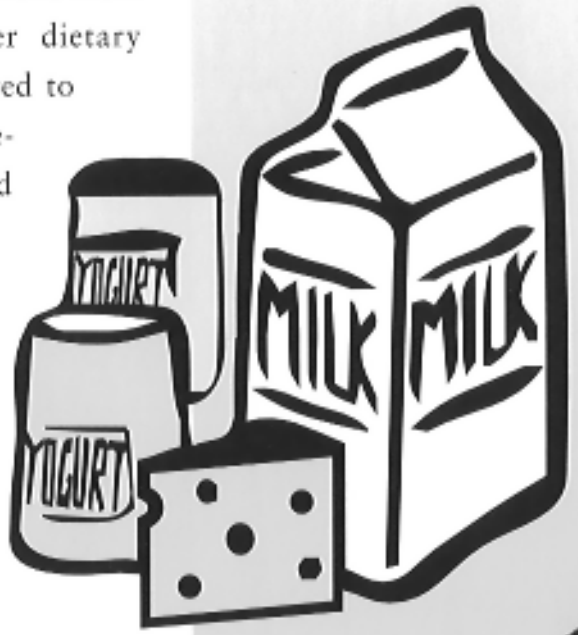
Calcium is best absorbed through acidic areas of the body such as the stomach, where lactose, a sugar found in dairy products, enhances its absorption. Lactose intolerance – the inability to absorb this sugar – is a condition that can affect your consumption of dairy foods. An estimated 60% to 95% of adult African Americans, Mexican Americans, Native Americans, Asian Americans and people of Jewish descent are lactose intolerant. For these groups of people, eating dairy foods that contain lactose can cause cramps, diarrhea and reduced calcium absorption. Additionally, lactose intolerant women face greater risks of osteoporosis, a disorder where bone mass (the amount of bone) is reduced, skeletal strength is not maintained and fractures occur with minimal stress.

Another problem with insufficient calcium intake lies in its relationship to hypertension. Recent research shows that higher calcium intake is associated with lower blood pressure levels. In this instance, both children and women appear to benefit from increased calcium intake. Higher dietary calcium consumption also is believed to protect against noninsulin-dependent diabetes and colon and rectal cancers.

At least 1200mg of calcium a day is recommended for men and women. Two to 3 servings of dairy foods daily are recommended. For children ages 1 to 10 years and older adults, 800mg is recommended. One cup of milk contains 297mg of calcium.

2 to four servings

Two to four dairy servings are recommended each day.



Calcium is important for growth, development and the prevention of osteoporosis.

African Americans don't consume enough calcium, especially women, girls and older adult males.

Adequate calcium intake can help prevent reduced bone strength, high blood pressure, diabetes and some cancers.

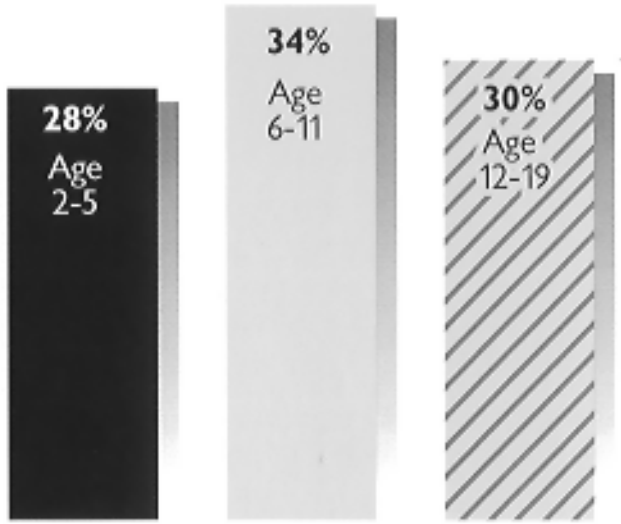
Gender and Age

Only 16% of all African Americans 2 years and older meet the minimum recommendation of at least 2 dairy servings daily (Table 19). African American women, on average, are most at risk – only 7% meet the recommendation. About a third of African American children 2 to 11 years old meet the minimum recommendation, however, only 14% of adolescent girls do so. Among African American men, those ages 40 to 59 years old appear most at risk with only 10% meeting the recommendation.

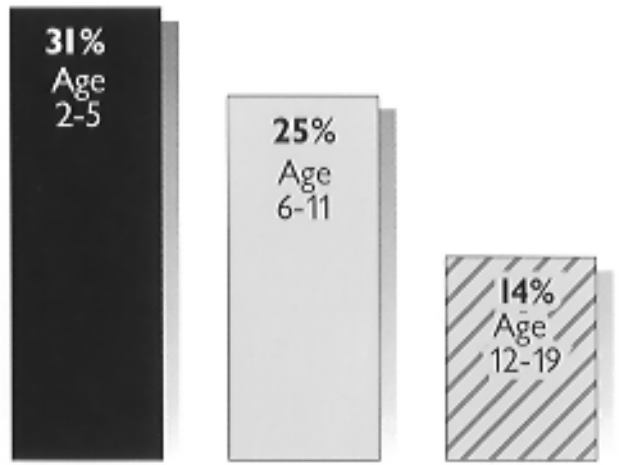
African Americans eat about 1.1 servings of dairy foods a day, mostly milk and cheese products (Table 20). As a result, our mean daily intake of calcium from food is only 673mg (Table 21). This is little more than half the amount recommended for adults and two-thirds for children and the elderly.

Males meeting dairy recommendation

Females meeting dairy recommendation



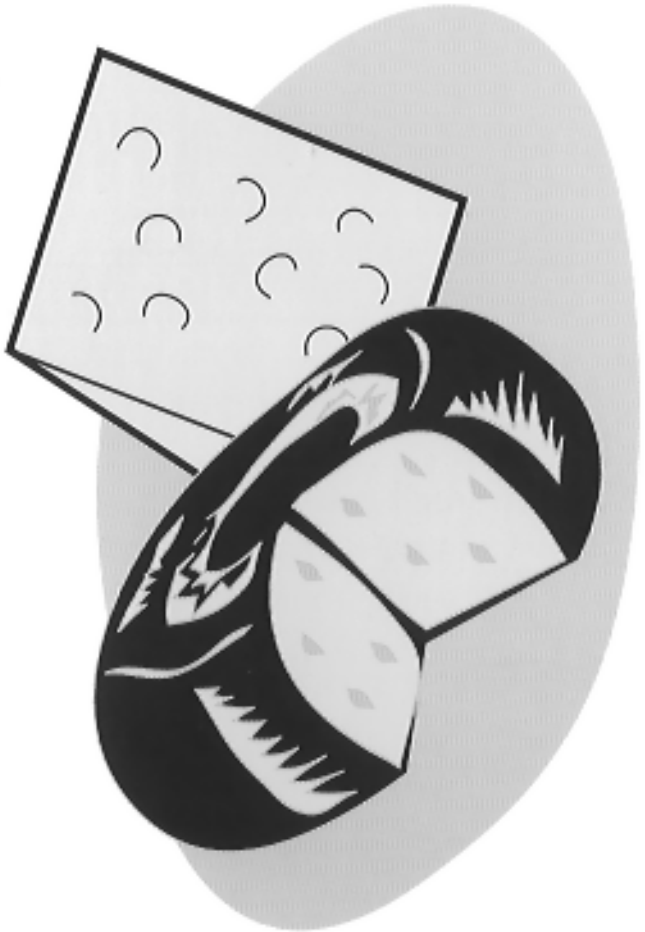
Male children meeting dairy recommendation



Female children meeting dairy recommendation

Annual Income & Food Stamp Use

Income appears to have an inverse relationship to the consumption of dairy foods (Tables 22, 23). Of African Americans with higher incomes, only 15% meet the minimum recommendation compared to 13% of those with middle incomes and 20% of those with lower incomes. Similarly, 15% of those who do not use food stamps meet the recommendation compared to 19% of those who do.



African Americans meeting dairy recommendation

African Americans meeting dairy recommendation

African Americans with lower incomes eat fewer fruits and vegetables, yet consume more dairy foods than others. Adequate calcium intake is important for overall health and resistance to some diseases.

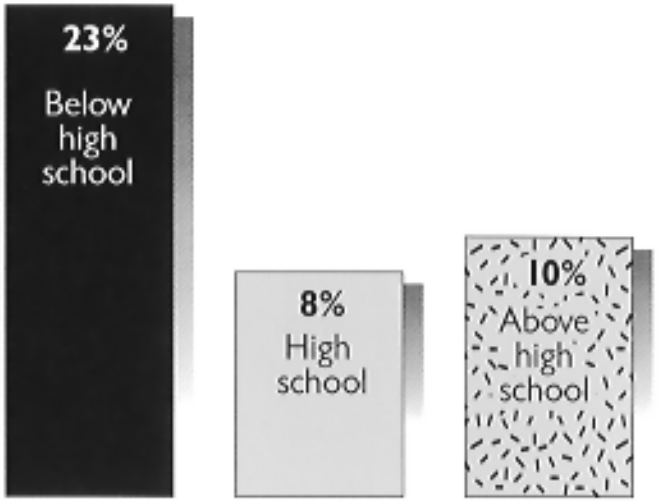
Whole grain foods and leafy green vegetables are important sources of calcium in the diet for African Americans who may be lactose intolerant.

70% of African Americans may be lactose intolerant, hindering them from obtaining sufficient calcium in their diet.

It is important for African Americans to realize that our calcium consumption is lowest of any ethnic group in the U. S.

Education

Education also appears to be inversely related to dairy food consumption. More than twice as many African Americans with the least education (23%) consume the recommended minimum dairy servings as those with no more than a high school education (8%) or those with even higher education (10%).



African Americans meeting dairy recommendation

Test Your Calcium I.Q.

1. **You need calcium throughout your life, not just when you're young.**

   ☐ True ☐ False

2. **A diet low in calcium may increase your risk of hypertension and colon cancer.**

   ☐ True ☐ False

3. **If you consume a lot of calcium, you will get kidney stones.**

   ☐ True ☐ False

4. **If you are lactose intolerant, you should avoid all milk and milk products.**

   ☐ True ☐ False

5. **If you aren't getting enough calcium from your diet, your body will take what it needs from your bones.**

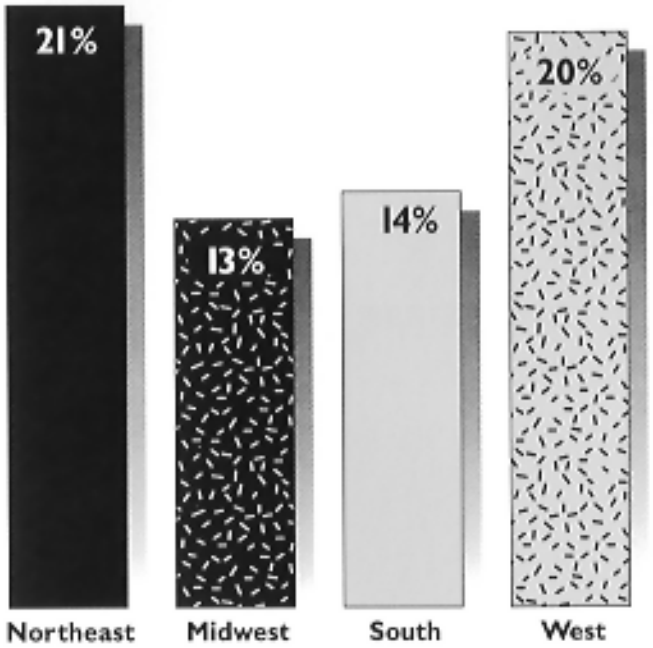
   ☐ True ☐ False

(Check your answers on Page 68)

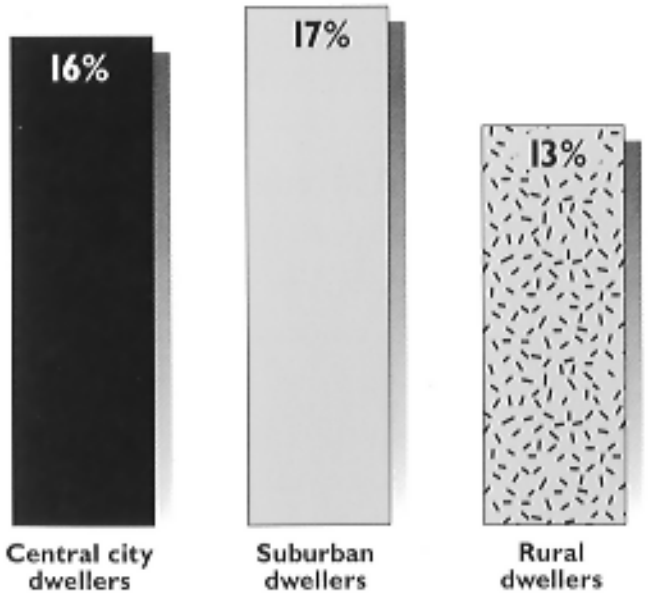
Region and Urbanization

African Americans residing in the Northeast, on average, eat the most from the dairy food group at 1.4 servings daily, followed by Westerners at 1.3 servings, Midwesterners at 1.1 servings and Southerners at 1.0 servings per day. Regardless of the degree of urbanization, fewer than 20% of all African Americans meet the minimum recommendation of 2 dairy servings a day.

African Americans living in the Northeast consume more calcium than those living elsewhere. Yet, fewer than 20% of all African Americans get enough calcium in their diet!



African Americans meeting dairy recommendation



African Americans meeting dairy recommendation

Most dairy foods are available as lowfat and nonfat products. Many are produced in lactose free varieties.

Other low fat, calcium rich foods such as whole grains and leafy green vegetables can help you get the calcium you need.

Calcium Quiz Answers:

1. True. Even after you've stopped growing tall, your bones continue to grow strong and dense. As you continue to age, calcium helps you maintain your bone density.

2. True. Research shows that getting plenty of calcium can help keep your blood pressure in check and may also reduce your risk of colon cancer.

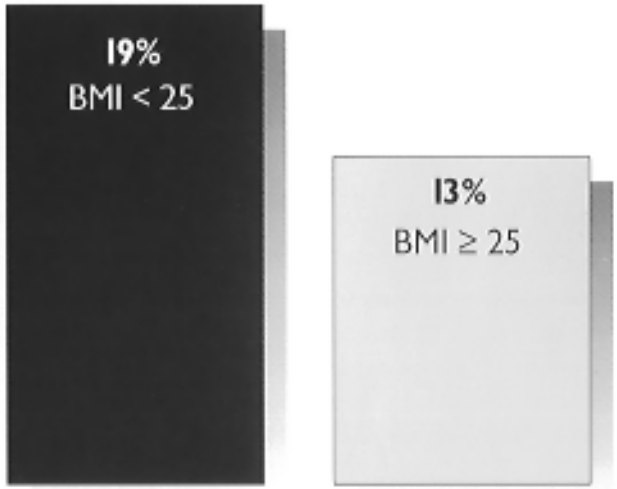
3. False. Unless you have a history of kidney stones, a high calcium intake does not cause kidney stones.

4. False. Most people who have trouble digesting lactose can consume at least 1 cup of milk with food.

5. True. If your diet is short on calcium, your body will "rob" what it needs from your bones. Over time, this bone loss can increase your risk of osteoporosis.

Body Mass Index (BMI)

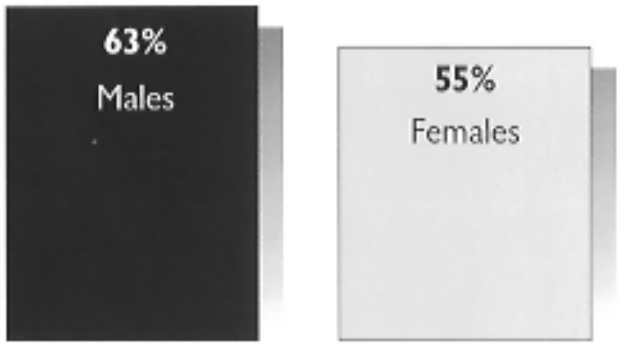
BMI does not appear to be related to dairy food consumption. Fewer than 20% of African Americans, regardless of weight status, meet the minimum recommendation.



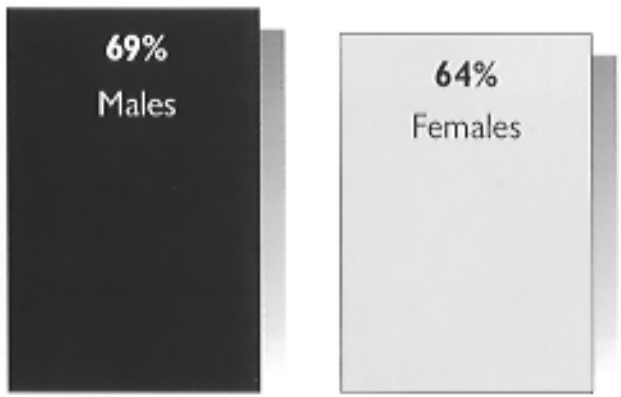
African Americans meeting dairy recommendation

Knowledge, Attitudes and Behaviors

When African Americans are asked to provide a self-assessment of their calcium intake, more than half believe it to be "about right"; two-thirds believe that eating at least 2 dairy servings a day is "somewhat" or "very" important (Tables 24, 25). Most African Americans appear to share the knowledge and attitudes relative to the importance of calcium in the diet, but do not choose to act on this information. It is important for African Americans to realize that, as a group, our calcium consumption is the lowest of any ethnic group in the U.S. Thirty-three percent of African Americans meet the minimum dietary recommendation for calcium as compared to 50% of Mexican Americans and 48% of whites. We should work to improve this finding by consuming more lowfat and fat-free dairy and calcium-rich foods.



African Americans believing calcium intake about right

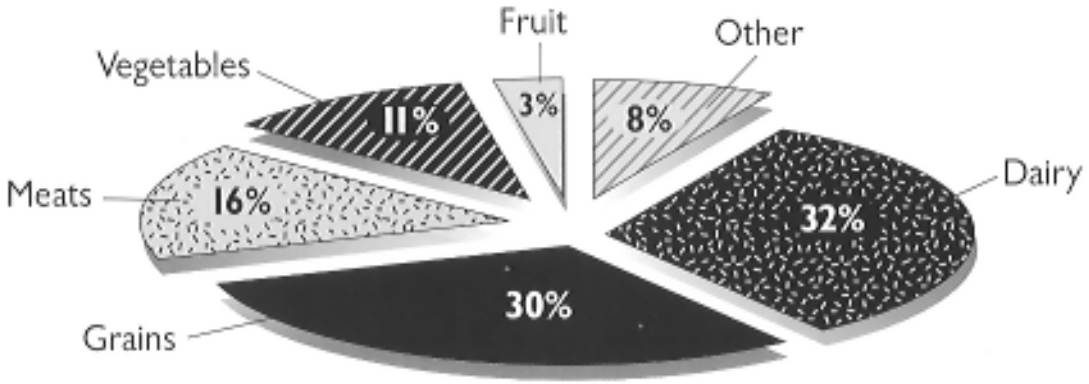


African Americans finding two calcium servings important

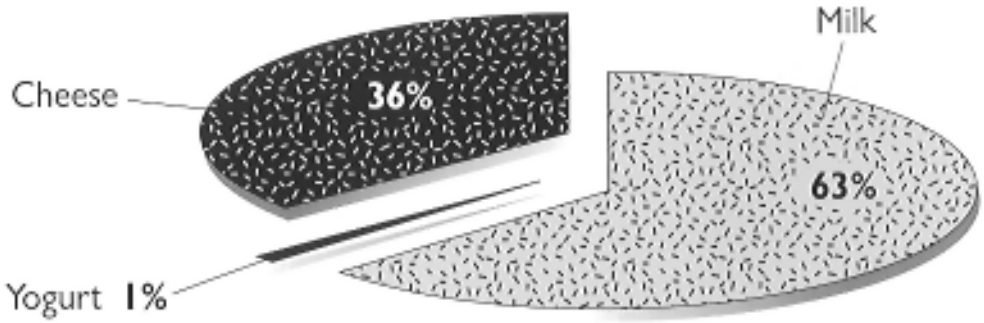
Conclusion

African Americans do not meet the recommendation for daily dairy food consumption or calcium intake. While this finding could be due to a higher incidence of lactose intolerance among African Americans, which may lead many to avoid milk and its products, calcium must be consumed to assure its adequate protective and functional benefits for overall health. Moreover, other vitamins and minerals from dairy foods are equally important. African Americans must find ways to increase their calcium intake. The figures on this page illustrate African American food sources for calcium (Tables 26, 27). Public health initiatives should emphasize eating low fat and lactose-free dairy foods, leafy green vegetables, calcium-fortified foods, including some cereals, and calcium supplements, in some cases.

African Americans obtain almost 2/3 of their calcium from milk. Eat leafy green vegetables, whole grain foods and calcium fortified products to increase calcium intake.



Food sources for calcium



African American dairy food sources for calcium

The Bottom Line

Calcium is important for strong bones and overall health

Eat a variety of calcium rich foods

2 to 3 servings (4–9 oz.) a day

- Protein
- Vitamins & Minerals
- Phytochemicals

The Meat Group lies adjacent to the Dairy Group on the Food Guide Pyramid. Foods from the Meat Group are important because they provide protein, B vitamins, iron, zinc and phytochemicals. Some meat products are also high in fat, which calls for making leaner choices. Beans, which are included in the Meat Group on the Pyramid, are an important source of vegetable protein and phytochemicals.

In this chartbook, total meat consumption includes meats (beef, pork, lamb, goat, game), poultry, fish, organ meats, frankfurters and lunch meats, eggs, soybean products, and nuts and seeds. Dried beans, a source of vegetable protein, are discussed in the chapter on vegetables. A minimum of 2 to 3 meat servings is recommended per day. One serving is equal to 2–3 ounces, depending on what calorie level is best for you. For a person who requires 1600 calories a day, 2 ounces equal one serving. That serving increases to 2.5 ounces for someone who needs 2200 calories and 3 ounces for individuals who need 2800 calories a day.

Important Nutrients and Food Components

Protein

Sufficient protein in the body is critical for many body processes. Similar to the complex carbohydrates found in grains, protein in meat group foods provides energy to the body. In addition, protein plays an important part in the formation of enzymes, hormones and various body fluids. As antibodies (substances in the body that destroy or weaken bacteria and other substances harmful to the body), proteins also are involved in the effective functioning of the immune system, fighting disease and infection.

Vitamins and Minerals

The B vitamins include riboflavin, thiamine, niacin, B_6, B_{12}, pantothenic acid, biotin, and folate. These vitamins are necessary to the body's metabolic processes – those physical and chemical activities necessary for the maintenance of life. A deficiency in any of the B vitamins can lead to serious mental and physical problems. The best source of dietary iron is found in liver, but other iron-rich foods include oysters, shellfish, kidneys, hearts, lean meats, poultry and fish.

Phytochemicals

We discussed phytoestrogens in the chapter on grains. These phytochemicals and others are found in beans. Soy beans, especially, are a good source of phytoestrogens. Nuts and seeds, such as peanuts and sesame seeds, contain other phytochemicals with protective anticancer properties.

2 to three servings

Two to three servings of meat are recommended daily for adequate protein intake.

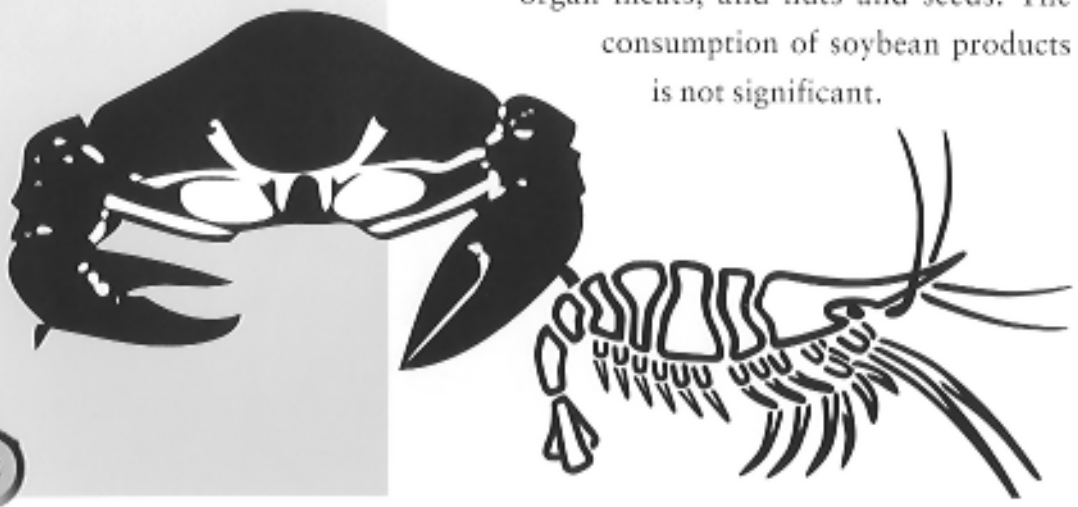
Liver, oysters, shellfish, kidneys, hearts and lean meats, poultry and fish are good sources of iron.

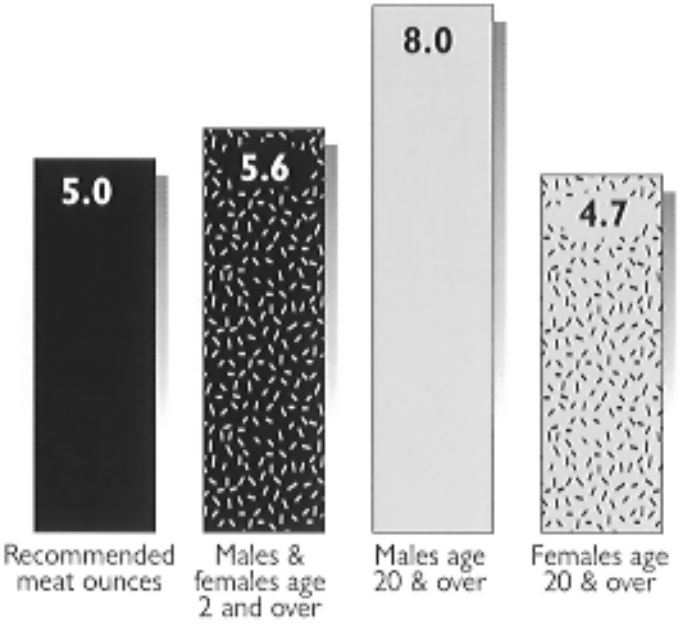
45% of African Americans meet or exceed the recommended servings of meat per day. Choosing lean cuts of meat, such as round, sirloin or loin, can help cut the fat consumption associated with meats.

Gender and Age

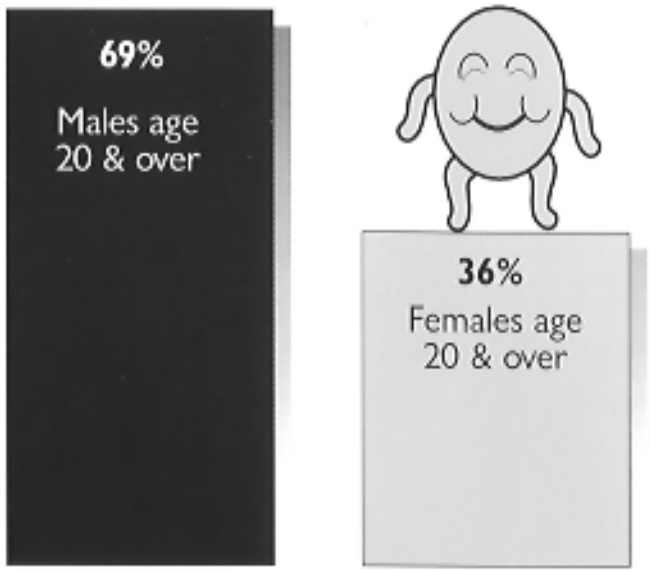
Forty-five percent of all African Americans 2 years and older eat at least 5 ounces of meat products a day, which means we meet, and sometimes exceed, the minimum daily recommendation of 2 to 3 servings (Table 28). Individuals 2 years of age and older, on average, eat 5.6 ounces (more than 2 servings) of meat a day. Males 20 years of age and older consume among the most meat, at 8.0 ounces, or more than 3 servings, a day (Table 29). While a majority of males 20 years of age and older (69%) meet the recommendation at 5 ounces a day, only 36% of women in the same age group do so.

For men and women, meat products consumed most frequently, from most to least are: meat, poultry (chicken, turkey, duck and hen), frankfurters and lunch meats, fish, eggs, organ meats, and nuts and seeds. The consumption of soybean products is not significant.





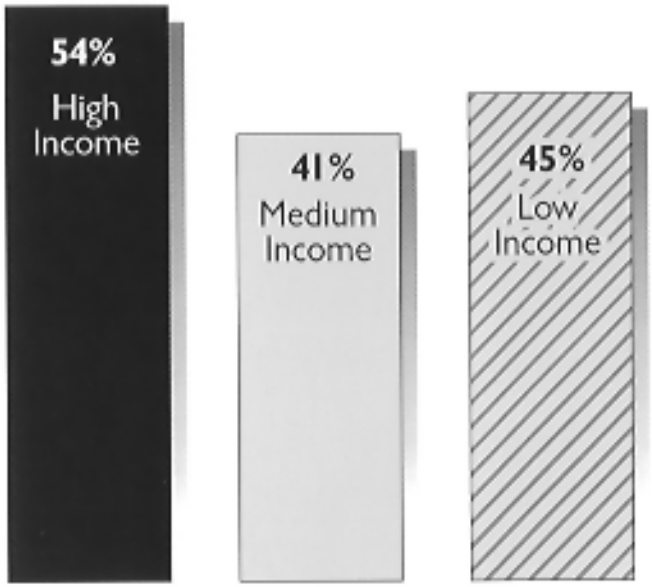
Average ounces of meat eaten by African Americans



African Americans meeting meat recommendation

Annual Income & Food Stamp Use

Differences in income reflect some difference in the consumption of meat products. More higher-income African Americans (54%) meet the minimum recommendation for meat than those in middle- (41%) and low-income (45%) groups. African Americans with higher incomes eat 5.7 ounces daily, compared to those with middle incomes (5.2 ounces) and those with lower incomes (6.0 ounces). Similarly, those who use food stamps eat 5.2 ounces, while those who do not consume 5.7 ounces, on average (Tables 30, 31).



African Americans meeting meat recommendation

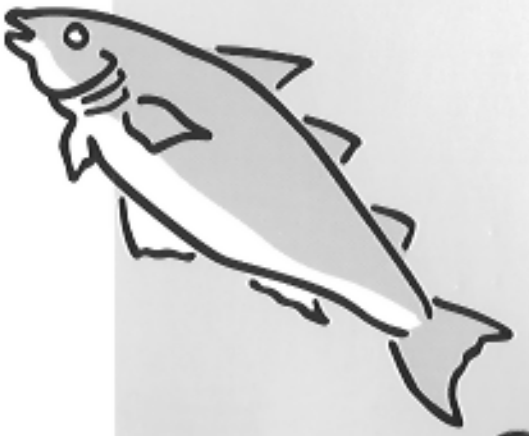
Average ounces of meat eaten by African Americans

Average ounces of meat eaten by African Americans

Palm-size!

A 3 oz. meat serving is about the size of the palm of your hand or a deck of playing cards.

African Americans with higher incomes tend to eat more meat than those with lower incomes. Choosing fish and poultry more often and limiting other meats to 1 to 2 times per week can further reduce fat consumption.



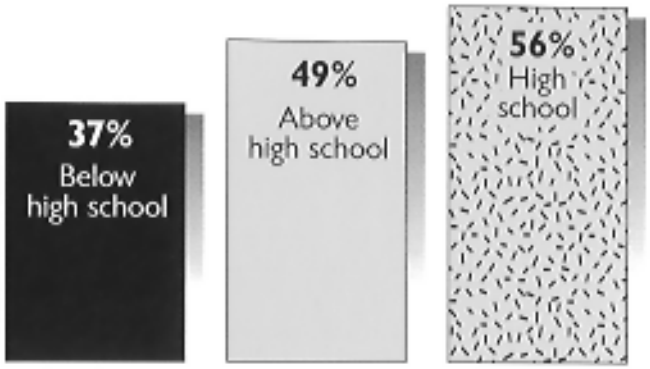
Did you know?

Dried beans and eggs are included in the Meat Group because they are good sources of protein.

The phytoestrogens and other phytochemicals found in beans and nuts also provide protective anticancer properties.

Education

More high school graduates meet the minimum recommendation (56%) and consume the most meat products (6.3 ounces) per day. Almost half (49%) of African Americans with more than a high school education meet the recommendation, while only about 37% of those with less than a high school education do so.



African Americans meeting meat recommendation

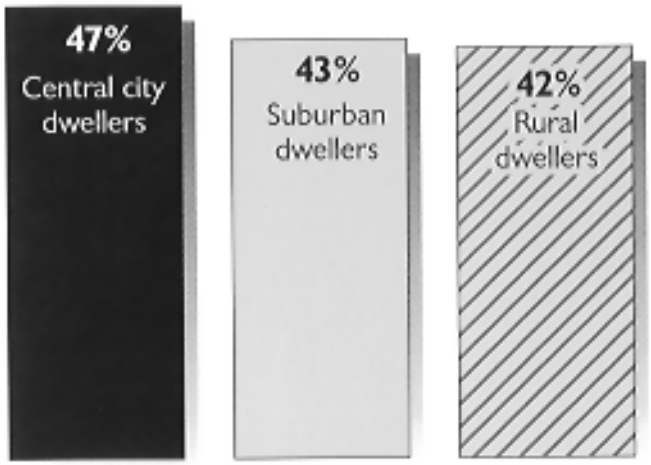
Cooking Healthy

Use these tips for cooking with meats.

- Bake, steam, roast, broil, stew or boil meats instead of frying.
  - — For crispy fish: roll in cornmeal before baking.
  - — For crispy chicken: remove the skin, dip in skim milk mixed with herbs and spices; roll in bread crumbs, cornflakes or potato flakes; and bake.
- Take off poultry skin before eating.
- Use a nonstick pan with vegetable cooking oil spray or a small amount of liquid vegetable oil instead of lard, butter, shortening, or other fats that are solid at room temperature.
- Trim visible fat before you cook meats.
- Chill meat and poultry broth until fat becomes solid. Skim off fat before using the broth.
- Cook greens with a skin-free turkey leg, fat-free bacon bits, or skimmed broth instead of fatty meats like bacon or fatback.

Region and Urbanization

African Americans who reside in the Northeast, on average, eat the most from the meat group of foods – 7.1 ounces daily. This is compared to 5.4 ounces eaten by those in the Midwest and 5.1 ounces eaten by those who reside in the West or South. Regardless of the degree of urbanization – central city (47%), suburban (43%), and rural residents (41%) – less than half of all African Americans meet the minimum recommendation.



African Americans meeting meat recommendation

Average ounces of meat eaten by African Americans

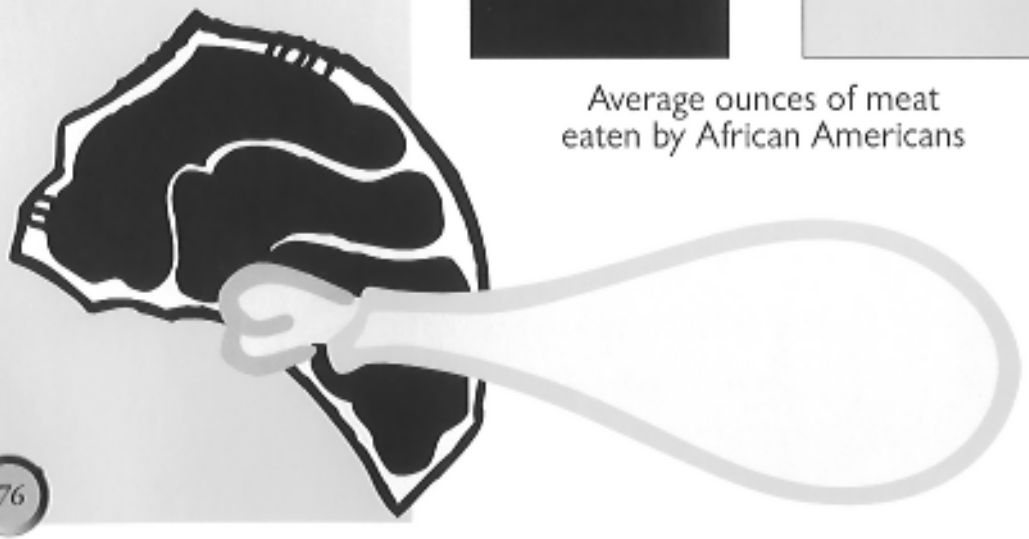
Less than half of African Americans meet the minimum recommendation for meat servings. Eat more dried beans, nuts and seeds to add protein and necessary phytochemicals.

Have you tried broiling or grilling your meats to reduce your fat intake? Marinade or season with low sodium herbs for a healthful and tasty treat!

Dried beans contain incomplete amino acids. Eat dried beans with brown rice or other whole grains to get the complete proteins your body can use.

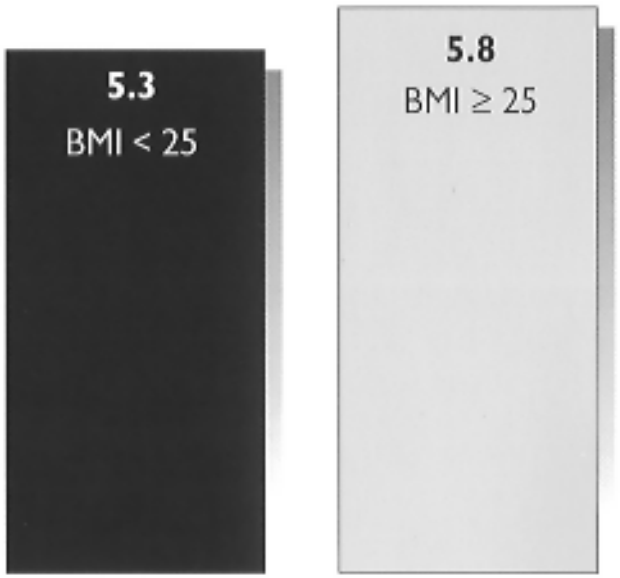
What's in a serving?

- 2–3 ounces of cooked lean meat, poultry or fish equal one serving.
- 1/2 cup of cooked dry beans or 1 egg counts as 1 ounce of lean meat.
- 2 tablespoons of peanut butter or 1/3 cup of nuts count as 1 ounce of meat.



Body Mass Index

Meat consumption does not appear to be significantly related to BMI. African Americans at healthy weight levels, with a BMI of less than 25, eat 5.3 ounces of meat per day, on average, while those at unhealthy weight levels (BMI of 25 or greater) eat about 5.8 ounces.



Average ounces of meat eaten by African Americans

Choose Lean

Use these examples to choose servings of lean and very lean meats.

Very Lean Meat and Protein Servings

• Turkey breast or chicken breast, skin removed	1 oz.
• Fish fillet (flounder, scrod, cod, haddock)	1 oz.
• Shellfish (clams, lobster, scallops, shrimp)	1 oz.
• Egg whites	2 each
• Beans - cooked (black beans, kidney, chickpeas, or lentils)	1 cup

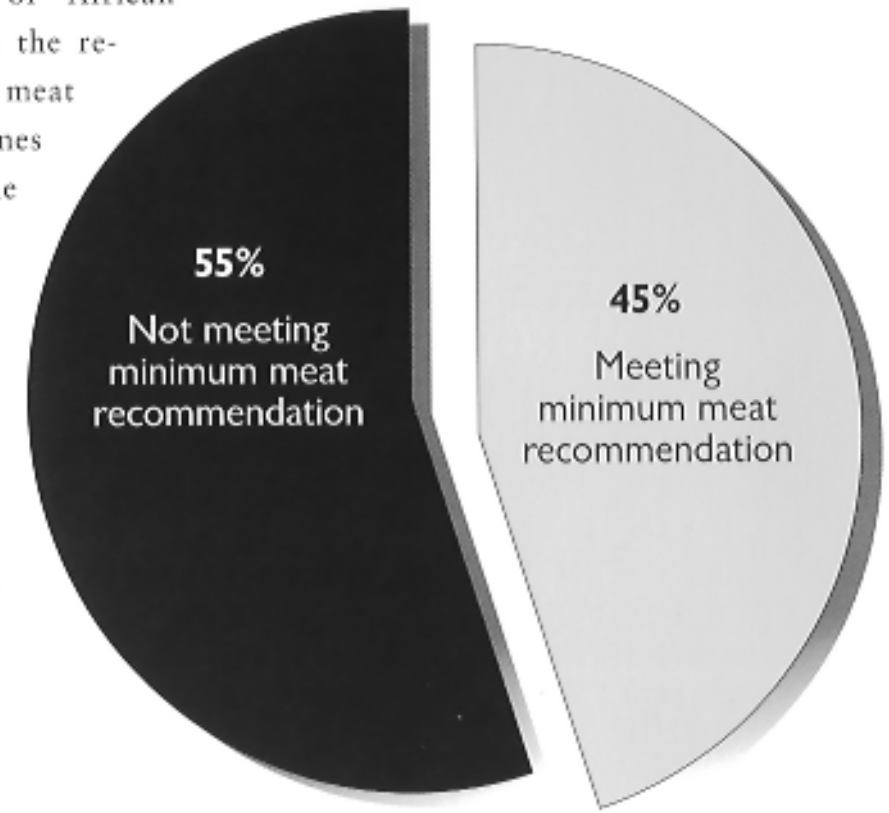
Lean Meat and Protein Servings

• Chicken - dark meat, skin removed	1 oz.
• Turkey - dark meat, skin removed	1 oz.
• Salmon, swordfish, herring, catfish, trout	1 oz.
• Lean beef (flank steak, London broil, tenderloin, roast beef)*	1 oz.
• Veal roast or lean chop*	1 oz.
• Pork tenderloin or fresh ham*	1 oz.
• Lowfat luncheon meats (with 3 grams of fat per ounce)	1 oz.

* Limit to 1 to 2 times per week.

Conclusion

Forty-five percent of African Americans appear to meet the recommendation for daily meat consumption. Males at times exceed the minimum. While it is important to eat a variety of foods from this group, you should aim for lean choices, more combinations of meat and meat alternatives, and smaller quantities to maximize the nutritional benefits and minimize unhealthy effects.



Almost half of all African Americans meet the recommendation for meat consumption. We should make more lean meat choices and add more dried beans, eggs, nuts and seeds as meat alternatives to our diet. We should also choose grilling, baking, broiling and other lowfat cooking methods more often for our meats.

Skin it!

3 ounces of cooked lean chicken provides about 6 grams of fat; the same serving with skin may have as much as twice the amount of fat.

The Bottom Line

- Eat more lean and very lean meats.
- Add more meat alternatives to your diet.
- Choose smaller servings.

APPENDICES

About the Authors

Ellen Harris, DrPH, is the Assistant Director for Nutrition Monitoring at the Beltsville Human Nutrition Research Center (BHNRC), Agricultural Research Service (ARS), US Department of Agriculture (USDA). She also serves as the Research Leader for the Community Nutrition Research Group, one of the research units within BHNRC.

Dr. Harris is a native of Houston, Texas. She holds a doctorate in public health with an emphasis in public health nutrition and epidemiology from the University of Texas Health Science Center at Houston, School of Public Health. Dr. Harris' research interests are in public health policy, nutrition monitoring, food assistance programs and policy, program evaluation, international nutrition, food habits and dietary quality within low-income households.

Previous positions have included: Director of the Nutrition Monitoring Division (NMD) at the Human Nutrition Information Service (HNIS), USDA; Branch Chief, Food Consumption Research Branch, NMD, HNIS, USDA; Program Analyst, Office of Analysis and Evaluation, Food and Nutrition Service, USDA; Congressional Fellow, U. S. Select Committee on Hunger, U. S. House of Representatives; and Assistant Professor, Department of Nutrition and Food Sciences, Drexel University.

Yvonne Bronner, SC, RD, LD, received her undergraduate degree in Foods and Nutrition from the University of Akron, Masters from Case Western Reserve University and Doctor of Science from Johns Hopkins School of Hygiene and Public Health. Dr. Bronner taught in the Nutrition Department at Howard University for nine years and Johns Hopkins University for nine years before accepting an appointment at Morgan State University to develop their MPH/DrPH Program.

Dr. Bronner has conducted research on how to increase breastfeeding among African American women as well as involving men in the promotion of breastfeeding and family health. She has also conducted research on intervention strategies to decrease obesity. Dr. Bronner has several publications in each of these areas. Her most recent project was serving as Co-Principal Investigator on a project funded by the Centers for Disease Control and Prevention, which was implemented in African-American churches in Baltimore, Maryland.

The objective of her work is to develop methods to help African American women conduct self-assessments and make lifestyle choices for achieving and maintaining a 'healthy weight'.

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DATA TABLES

Table 1

Pyramid Servings by percentage of energy from levels of total fat, saturated fat, and added sugar consumed by African Americans per day, 2-day average, 1994 - 1996

Pyramid Servings

	Energy from Total Fat		Energy from Saturated Fat		Energy from Added Sugar		
	<=30%	>30%	<10%	>=10%	<10%	10-18%	>18%
	Mean Number of Servings						
Dairy servings	0.9	1.2	0.6	1.1	1.0	1.3	1.1
Fruit servings	2.0	1.2	1.9	1.1	1.7	1.4	1.1
Vegetable servings	2.6	3.2	2.8	3.2	3.3	3.3	2.7
Grain servings	5.5	6.4	5.6	6.4	5.7	6.4	6.3
Meat ounces	3.9	6.1	4.4	6.1	6.4	5.5	5.2

Source: USDA CSFII, 1994 - 1996

Table 2

Selected Food Group Intakes by percentage of energy from levels of added sugar consumed by African Americans per day, 2-day average, 1994 - 1996

Selected Intakes

	Energy from Added Sugar		
	<10%	10% - 18%	>18%
	Mean Intake (grams)		
Ready to eat cereals	7.2	13.1	14.5
Cakes, cookies, pastries, pies	13.0	26.6	37.5
Citrus juices	96.0	63.1	45.3
Non-citrus juices	44.1	30.2	16.3
Total fluid milk	121.5	160.1	108.7
Milk desserts	5.3	20.0	30.3
Total sugars and sweets	7.2	18.7	36.4
Sugars	1.9	3.4	5.0
Candy	1.3	3.5	6.8
Regular fruit drinks and ade	29.2	129.6	229.6
Regular carbonated soft drinks	74.4	186.5	386.0

Source: USDA CSFII, 1994 - 1996

Table 3

Physical activity: Frequency of vigorous exercise among African Americans aged 20 years of age and older, by sex and age, 1994 - 1996

Sex & Age (in Years)	Percentage of Population	Daily	5 - 6 times per week	2 - 4 times per week	Once per week	1 - 3 times per month	Rarely	Not Ascertained
				Percent				
Males:								
20-29	11.4	35.5	7.8	16.1	7.8	4.2	27.6	0.9
30-39	12.4	21.1	8.8	40.2	0.0	5.9	24.0	0.0
40-49	7.1	35.2	15.5	12.7	12.8	0.4	23.6	0.0
50-59	6.7	8.1	13.8	18.5	5.8	4.7	49.1	0.0
60-69	4.4	35.1	2.3	13.8	0.0	4.6	44.2	0.0
70 and over	2.6	16.0	3.8	10.9	0.0	5.6	63.7	0.0
20 and over	44.6	26.2	9.4	22.1	4.9	4.3	32.9	0.2
Females:								
20-29	11.3	21.2	1.1	13.9	8.3	4.7	50.8	0.0
30-39	13.7	14.3	4.1	14.2	3.4	6.6	57.4	0.0
40-49	8.1	8.8	2.2	18.0	4.4	6.5	60.2	0.0
50-59	8.1	13.5	0.6	18.1	3.9	5.2	58.8	0.0
60-69	7.1	10.7	7.9	9.7	0.0	4.1	67.6	0.0
70 and over	7.3	11.0	4.3	10.8	1.1	0.8	71.1	0.8
20 and over	55.4	13.9	3.2	14.2	3.9	4.9	59.7	0.1
All 20 and over	100.0							

Source: USDA CSFII, 1994 - 1996

Table 4

Grain group: Mean numbers of Pyramid servings consumed by African Americans per day, by age and sex, 2-day average, 1994 - 1996

Sex & Age (in Years)	Percentage of Population	Total Grain Products	Whole Grain Products	Non-whole Grain Products
	Percent	*Servings*		
Males:				
2-5	4.4	6.5	1.0	5.5
6-11	5.5	6.5	0.7	5.7
12-19	6.3	8.2	0.9	7.4
20-39	13.2	9.1	0.7	8.4
40-59	10.4	6.4	0.8	5.6
60 and over	5.5	5.4	0.6	4.8
20 and over	29.0	7.4	0.7	6.7
Females:				
2-5	4.3	6.0	0.8	5.1
6-11	6.1	5.7	0.6	5.0
12-19	8.3	5.9	0.6	5.3
20-39	17.3	5.3	0.6	4.8
40-59	10.6	4.7	0.7	4.0
60 and over	8.2	4.3	0.7	3.6
20 and over	36.1	4.9	0.6	4.3
All individuals				
2 and over	100.0	6.2	0.7	5.5

The data have been adjusted for children ages 2-5 years because children at this age may have lower energy needs. For children age 2-5 years who consumed less than 1,600 calories per day, one serving has been calculated as two-thirds of a standard serving size to allow for their lower energy needs.

Source: USDA CSFII, 1994 - 1996

Table 5

Grain group: Percentage of African Americans consuming specified numbers of Pyramid servings per day, by age and sex, 2-day average, 1994 - 1996

Sex & Age (in Years)	Percentage of Population	Percentage of Individuals	
		Consuming less than 1 Serving a Day	Consuming at least Minimum Number of Servings Recommended (6 a day)
	Percent	*Servings*	
Males:			
2-5	4.4	0.0	58.2
6-11	5.5	0.5	52.2
12-19	6.3	1.2	62.3
20-39	13.2	2.7	61.2
40-59	10.4	1.7	53.2
60 and over	5.5	1.0	30.3
20 and over	29.0	2.0	52.5
Females:			
2-5	4.3	0.0	43.3
6-11	6.1	0.0	36.0
12-19	8.3	1.2	40.3
20-39	17.3	0.8	31.0
40-59	10.6	2.6	23.2
60 and over	8.2	0.8	19.9
20 and over	36.1	1.3	26.2
All individuals			
2 and over	100.0	1.3	41.4

The data have been adjusted for children ages 2-5 years because children at this age may have lower energy needs. For children age 2-5 years who consumed less than 1,600 calories per day, one serving has been calculated as two-thirds of a standard serving size to allow for their lower energy needs.

Source: USDA CSFII 1994 - 1996

Table 6

Grain group: Percentage of African Americans consuming specified numbers of Pyramid servings per day, by selected demographic characteristics, 2-day average, 1994 - 1996

Demographics	Percentage of Population	Percentage of Individuals	
		Consuming less than 1 Serving a Day	Consuming at least Minimum Number of Servings Recommended (6 a day)
	Percent	*Percent*	
Region			
Northeast	21.2	0.5	48.2
Midwest	20.4	1.1	36.2
South	51.3	1.8	40.2
West	7.0	0.0	45.7
Urbanization			
Central city	65.6	1.2	42.5
Suburban	24.1	1.5	41.6
Rural	10.3	1.1	34.1
Food stamp usage			
Yes	27.6	0.6	44.5
No	69.3	1.6	41.1
Missing	3.1	0.0	21.5
Education level			
Less than high school	46.8	0.6	45.6
High school	28.7	1.3	42.7
Above high school	23.0	2.7	31.2
Not ascertained	1.5	0.0	46.8
% of poverty category			
0-130	37.4	0.7	45.0
131-350	43.4	1.2	38.9
Over 350	19.2	2.5	40.3
Body mass index			
Less than 25.0	45.5	0.8	47.9
Greater or equal to 25.0	54.5	1.7	36.1
All individuals			
2 and over	100.0	1.3	41.4

The data have been adjusted for children ages 2-5 years because children at this age may have lower energy needs. For children age 2-5 years who consumed less than 1,600 calories per day, one serving has been calculated as two-thirds of a standard serving size to allow for their lower energy needs.

Source: USDA CSFII, 1994 - 1996

Demographics	Percentage of Population	Total Grain Products	Whole Grain Products	Non-Whole Grain Products
	Percent	*Servings*		
Region				
Northeast	21.2	7.4	0.6	6.7
Midwest	20.4	5.9	0.8	5.1
South	51.3	5.8	0.7	5.1
West	7.0	6.4	0.9	5.5
Urbanization				
Central city	65.6	6.4	0.7	5.7
Suburban	24.1	5.9	0.7	5.2
Rural	10.3	5.5	0.5	5.0
Food stamp usage				
Yes	27.6	6.2	0.6	5.6
No	69.3	6.2	0.7	5.5
Missing	3.1	5.2	0.5	4.8
Education level				
Less than high school	46.8	6.6	0.7	5.9
High school	28.7	6.0	0.7	5.3
Above high school	23.0	5.6	0.8	4.8
Not ascertained	1.5	6.6	0.7	6.0
% of poverty category				
0-130	37.4	6.8	0.6	6.2
131-350	43.4	5.7	0.7	5.0
Over 350	19.2	6.0	0.9	5.2
Body mass index				
Less than 25.0	45.5	6.5	0.7	5.8
Greater or equal to 25.0	54.5	5.9	0.7	5.3
All individuals				
2 and over	100.0	6.2	0.7	5.5

The data have been adjusted for children ages 2-5 years because children at this age may have lower energy needs. For children age 2-5 years who consumed less than 1,600 calories per day, one serving has been calculated as two-thirds of a standard serving size to allow for their lower energy needs.

Source: USDA CSFII 1994 - 1996

Table 7

Grain group: Mean numbers of Pyramid servings consumed by African Americans per day, by selected demographic characteristics, 2-day average, 1994 - 1996

Dietary Guidance

Table 8

Perceived importance of dietary guidance among African Americans 20 years of age and older, by sex, 1994 - 1996

	Very Important	Somewhat Important	Not too important	Not at all Important	Don't Know	Not Ascertained
	Percent					
Men: (N = 248)						
Use salt or sodium only in moderation	44.3	29.4	17.7	8.2	0.1	0.2
Choose a diet:						
low in saturated fat	48.0	28.5	17.0	3.0	3.4	0.2
with plenty of fruits & vegetables	64.1	21.7	11.4	2.5	0.1	0.1
Use sugars only in moderation	44.2	34.8	17.1	1.9	0.7	1.3
Choose a diet:						
with adequate fiber	45.4	32.5	17.9	1.9	1.2	1.1
Eat a variety of foods	50.1	34.1	11.8	2.9	0.1	0.9
Maintain a healthy weight	74.9	22.3	2.4	0.3	0.0	0.1
Choose a diet:						
low in fat	56.2	27.9	12.2	3.0	0.7	0.0
low in cholesterol	60.2	24.7	10.7	2.2	2.3	0.0
with plenty of breads, cereals, rice & pasta	31.2	34.1	28.5	5.9	0.3	0.0
Eat at least:						
two servings of dairy products daily	37.3	31.2	20.8	9.7	1.0	0.0
Women: (N = 392)						
Use salt or sodium only in moderation	51.0	29.8	13.6	4.4	0.7	0.6
Choose a diet:						
low in saturated fat	52.6	29.2	10.4	4.0	3.2	0.6
with plenty of fruits & vegetables	66.6	26.2	5.3	0.3	0.3	1.3
Use sugars only in moderation	55.3	32.0	10.2	2.3	0.2	0.1
Choose a diet:						
with adequate fiber	53.0	32.4	10.8	1.6	1.9	0.4
Eat a variety of foods	55.7	32.9	7.8	3.1	0.3	0.2
Maintain a healthy weight	77.1	17.5	3.1	1.6	0.3	0.3
Choose a diet:						
low in fat	68.0	23.0	7.1	0.6	0.9	0.5
low in cholesterol	64.1	23.5	8.1	1.6	1.8	0.8
with plenty of breads, cereals, rice & pasta	26.1	31.5	31.8	9.5	0.4	0.8
Eat at least:						
two servings of dairy products daily	39.0	25.2	27.6	6.3	1.6	0.2

Source: USDA Diet and Health Knowledge Survey, 1994 - 96

Demographics	Percentage of Population	Very Important	Somewhat Important	Not too Important	Not at all Important	Don't Know	Not Ascertained
	Percent	*Percent*					
Region							
Northeast	22.7	34.2	28.3	28.8	8.6	0.2	0.0
Midwest	20.8	32.1	37.8	22.1	7.7	0.0	0.2
South	49.9	21.2	33.1	37.7	6.8	0.5	0.7
West	6.6	51.3	27.5	6.1	14.1	1.0	0.0
Urbanization							
Central city	66.5	27.2	32.3	30.8	8.8	0.5	0.4
Suburban	24.4	31.8	37.0	25.6	5.2	0.1	0.2
Rural	9.2	28.0	23.3	39.2	8.3	0.3	0.8
Food stamp usage							
Yes	21.2	28.2	34.0	25.7	11.9	0.2	0.0
No	77.8	28.2	31.9	32.0	6.9	0.4	0.5
Missing	1.0	45.1	54.9	0.0	0.0	0.0	0.0
Education level							
Less than high school	22.7	26.7	33.6	31.8	6.3	1.6	0.0
High school	40.6	28.4	28.5	32.6	10.3	0.0	0.2
Above high school	35.0	28.7	37.3	26.8	6.2	0.0	1.0
Not ascertained	1.7	42.5	21.2	29.5	6.8	0.0	0.0
% of poverty category							
0-130	33.0	30.5	38.3	22.4	7.8	0.6	0.4
131-350	44.0	25.6	23.9	40.4	9.2	0.4	0.7
Over 350	23.0	30.6	41.3	22.5	5.6	0.0	0.0
Body mass index							
Less than 25.0	27.0	35.3	31.4	27.0	5.1	0.9	0.2
Greater or equal to 25.0	73.0	25.8	33.1	31.6	8.9	0.2	0.5
All individuals	100.0	28.4	32.6	30.3	7.9	0.4	0.4

Table 9

Perceived importance of dietary guidance: Choose a diet with plenty of breads, cereals, rice and pasta, among African Americans 20 years of age and older, by selected demographic characteristics, 1994 - 1996

Source: USDA Diet and Health Knowledge Survey, 1994 - 96

Table 10

Fruit group: Mean numbers of Pyramid servings consumed by African Americans per day, by age and sex, 2-day average, 1994 - 1996

Sex & Age (in Years)	Percentage of Population	Total Fruits	Citrus, Fruits, Melon, Berries	Other Fruits
	Percent		*Servings*	
Males:				
2-5	4.4	1.8	0.7	1.1
6-11	5.5	1.1	0.6	0.6
12-19	6.3	1.2	0.7	0.5
20-39	13.2	1.0	0.6	0.6
40-59	10.4	1.9	1.1	0.7
60 and over	5.5	1.6	0.8	0.8
20 and over	29.0	1.4	0.8	0.6
Females:				
2-5	4.3	1.9	0.7	1.2
6-11	6.1	1.4	0.7	0.7
12-19	8.3	1.1	0.6	0.5
20-39	17.3	1.2	0.6	0.6
40-59	10.6	1.4	0.8	0.7
60 and over	8.2	1.5	0.9	0.6
20 and over	36.1	1.3	0.7	0.6
All individuals				
2 and over	100.0	1.4	0.7	0.6

The data have been adjusted for children ages 2-5 years because children at this age may have lower energy needs. For children age 2-5 years who consumed less than 1,600 calories per day, one serving has been calculated as two-thirds of a standard serving size to allow for their lower energy needs.

Source: USDA CSFII, 1994 - 1996

Sex & Age (in Years)	Percentage of Population	Percentage of Individuals	
		Consuming less than 1 Serving a Day	Consuming at least Minimum Number of Servings Recommended (2 a Day)
	Percent	*Percent*	
Males:			
2-5	4.4	36.7	39.2
6-11	5.5	54.8	19.8
12-19	6.3	63.7	20.0
20-39	13.2	60.9	16.0
40-59	10.4	52.0	36.0
60 and over	5.5	42.8	27.3
20 and over	29.0	54.3	25.3
Females:			
2-5	4.3	35.8	33.5
6-11	6.1	48.1	26.5
12-19	8.3	63.6	20.0
20-39	17.3	59.7	19.0
40-59	10.6	52.9	24.2
60 and over	8.2	42.6	26.4
20 and over	36.1	53.8	22.2
All individuals 2 and over	100.0	53.6	24.1

The data have been adjusted for children ages 2-5 years because children at this age may have lower energy needs. For children age 2-5 years who consumed less than 1,600 calories per day, one serving has been calculated as two-thirds of a standard serving size to allow for their lower energy needs.

Source: USDA CSFII, 1994 - 1996

Table 11

Fruit group: Percentage of individuals consuming specified numbers of Pyramid servings by African Americans per day, by age and sex, 2-day average, 1994 - 1996

Table 12

Fruit group: Percentage of African Americans consuming specified numbers of Pyramid servings per day, by selected demographic characteristics, 2-day average, 1994 - 1996

Demographics	Percentage of Population	Percentage of Individuals	
		Consuming less than 1 Serving a Day	Consuming at least Minimum Number of Servings Recommended (2 a Day)
	Percent	*Percent*	
Region			
Northeast	21.2	37.2	39.2
Midwest	20.4	54.9	22.2
South	51.3	59.4	19.2
West	7.0	57.1	20.6
Urbanization			
Central city	65.6	52.6	24.0
Suburban	24.1	51.3	27.3
Rural	10.3	65.4	17.5
Food stamp usage			
Yes	27.6	59.7	20.3
No	69.3	50.8	26.3
Missing	3.1	60.4	9.8
Education level			
Less than high school	46.8	53.0	23.1
High school	28.7	61.6	21.0
Above high school	23.0	45.6	30.3
Not ascertained	1.5	40.9	22.1
% of poverty category			
0-130	37.4	56.4	19.6.
131-350	43.4	52.6	23.6
Over 350	19.2	50.2	34.4
Body mass index			
Less than 25.0	45.5	55.5	24.6
Greater or equal to 25.0	54.5	52.0	23.8
All individuals			
2 and over	100.0	53.6	24.1

The data have been adjusted for children ages 2-5 years because children at this age may have lower energy needs. For children age 2-5 years who consumed less than 1,600 calories per day, one serving has been calculated as two-thirds of a standard serving size to allow for their lower energy needs.

Source: USDA CSFII, 1994 - 1996

Demographics	Percentage of Population	Total Fruits	Citrus Fruits, Melons, Berries	Other Fruits
	Percent	*Servings*		
Region				
Northeast	21.2	1.9	1.0	0.9
Midwest	20.4	1.3	0.6	0.6
South	51.3	1.2	0.7	0.5
West	7.0	1.2	0.6	0.6
Urbanization				
Central city	65.6	1.4	0.7	0.7
Suburban	24.1	1.5	0.8	0.7
Rural	10.3	1.0	0.6	0.4
Food stamp usage				
Yes	27.6	1.2	0.6	0.6
No	69.3	1.4	0.8	0.7
Missing	3.1	1.1	0.8	0.3
Education level				
Less than high school	46.8	1.3	0.7	0.7
High school	28.7	1.2	0.7	0.5
Above high school	23.0	1.7	0.9	0.8
Not ascertained	1.5	1.4	0.8	0.6
% of poverty category				
0-130	37.4	1.2	0.6	0.6
131-350	43.4	1.4	0.8	0.6
Over 350	19.2	1.7	0.9	0.8
Body mass index				
Less than 25.0	45.5	1.3	0.7	0.7
Greater or equal to 25.0	54.5	1.4	0.8	0.6
All individuals				
2 and over	100.0	1.4	0.7	0.6

The data have been adjusted for children ages 2-5 years because children at this age may have lower energy needs. For children age 2-5 years who consumed less than 1,600 calories per day, one serving has been calculated as two-thirds of a standard serving size to allow for their lower energy needs.

Source: USDA CSFII 1994 - 1996

Table 13

Fruit group: Mean numbers of Pyramid servings consumed by African Americans per day, by selected demographic characteristics, 2-day average, 1994 - 1996

Table 14

Perceived importance of dietary guidance: Choose a diet with plenty of fruits and vegetables among African Americans 20 years of age and older, by selected demographic characteristics, 1994 - 1996

Demographics	Percentage of Population	Very Important	Somewhat Important	Not too important	Not at all Important	Don't Know	Not Ascertained
	Percent	*Percent*					
Region							
Northeast	22.7	68.9	19.7	10.5	1.0	0.0	0.0
Midwest	20.8	71.4	17.9	7.8	1.9	0.0	1.0
South	49.9	58.6	30.4	8.0	1.4	0.5	1.2
West	6.6	87.4	12.6	0.0	0.0	0.0	0.0
Urbanization							
Central city	66.5	65.3	25.0	7.2	1.3	0.1	1.2
Suburban	24.4	71.9	19.0	8.3	0.8	0.0	0.0
Rural	9.2	50.3	31.8	13.3	2.7	1.9	0.0
Food stamp usage							
Yes	21.2	56.5	27.2	13.9	1.4	0.0	1.0
No	77.8	67.9	23.3	6.5	1.3	0.3	0.8
Missing	1.0	72.6	27.4	0.0	0.0	0.0	0.0
Education level							
Less than high school	22.7	64.1	21.3	9.8	2.6	1.0	1.1
High school	40.6	66.4	23.0	9.2	1.4	0.0	0.0
Above high school	35.0	65.7	26.6	5.8	0.3	0.0	1.6
Not ascertained	1.7	57.5	39.4	0.0	3.2	0.0	0.0
% of poverty category							
0-130	33.0	66.9	21.9	8.6	1.7	0.2	0.8
131-350	44.0	61.1	29.0	7.1	1.7	0.4	0.7
Over 350	23.0	71.8	18.3	8.8	0.0	0.0	1.1
Body mass index							
Less than 25.0	27.0	64.1	24.9	7.4	1.8	0.0	1.9
Greater or equal to 25.0	73.0	66.0	23.9	8.2	1.2	0.3	0.4
All individuals	100.0	65.5	24.2	8.0	1.3	0.2	0.8

Source: USDA Diet and Health Knowledge Survey, 1994 -1996

Sex & Age (in Years)	Percentage of Population	Percentage of Individuals	
		Consuming less than 1 Serving a Day	Consuming at least Minimum Number of Servings Recommended (3 a Day)
	Percent	*Percent*	
Males:			
2-5	4.4	18.0	28.7
6-11	5.5	18.2	28.9
12-19	6.3	15.1	55.7
20-39	13.2	9.7	63.4
40-59	10.4	16.1	54.7
60 and over	5.5	17.2	38.2
20 and over	29.0	13.4	55.5
Females:			
2-5	4.3	18.6	31.2
6-11	6.1	16.6	29.3
12-19	8.3	9.2	38.2
20-39	17.3	12.3	37.5
40-59	10.6	11.6	41.3
60 and over	8.2	16.3	34.0
20 and over	36.1	13.0	37.8
All individuals			
2 and over	100.0	13.9	42.4

The data have been adjusted for children ages 2-5 years because children at this age may have lower energy needs. For children age 2-5 years who consumed less than 1,600 calories per day, one serving has been calculated as two-thirds of a standard serving size to allow for their lower energy needs.

Source: USDA CSFII, 1994 - 1996

Table 15

Vegetable group: Percentage of individuals consuming specified numbers of Pyramid servings by African Americans per day, by age and sex, 2-day average, 1994 - 1996

Table 16

Vegetable group: Mean numbers of Pyramid servings consumed by African Americans per day, by age and sex, 2-day average, 1994 - 1996

Sex & Age (in Years)	Percentage of Population	Total Vegetables	Dark Green Leafy Vegetables	Deep Yellow Vegetables	Cooked Dry Beans & Peas	Starchy Vegetables		Tomatoes	Other Vegetables
						White Potatoes	other starchy		
	Percent	*Servings*							
Males:									
2-5	4.4	2.2	0.1	0.1	0.1	1.0	0.2	0.3	0.5
6-11	5.5	2.3	0.1	0.1	0.1	1.1	0.2	0.3	0.5
12-19	6.3	3.5	0.2	0.1	0.2	1.8	0.2	0.5	0.6
20-39	13.2	4.3	0.3	0.1	0.2	1.7	0.3	0.6	1.2
40-59	10.4	3.7	0.3	0.2	0.4	1.1	0.4	0.4	1.1
60 and over	5.5	3.0	0.5	0.2	0.3	0.7	0.3	0.2	0.9
20 and over	29.0	3.9	0.3	0.1	0.3	1.3	0.3	0.4	1.1
Females:									
2-5	4.3	2.5	0.1	0.1	0.1	1.2	0.2	0.3	0.4
6-11	6.1	2.4	0.1	0.1	0.1	1.0	0.2	0.3	0.6
12-19	8.3	2.8	0.2	0.1	0.2	1.3	0.1	0.4	0.5
20-39	17.3	2.9	0.2	0.1	0.2	1.1	0.2	0.4	0.7
40-59	10.6	2.9	0.3	0.1	0.2	0.7	0.2	0.3	1.0
60 and over	8.2	2.5	0.4	0.2	0.1	0.4	0.3	0.2	0.9
20 and over	36.1	2.8	0.3	0.1	0.1	0.8	0.2	0.3	0.8
All individuals 2 and over	100.0	3.1	0.2	0.1	0.2	1.1	0.2	0.4	0.8

The data have been adjusted for children ages 2-5 years because children at this age may have lower energy needs. For children age 2-5 years who consumed less than 1,600 calories per day, one serving has been calculated as two-thirds of a standard serving size to allow for their lower energy needs.

Source: USDA CSFII, 1994 - 1996

Table 17

Vegetable group: Percentage of African Americans consuming specified numbers of Pyramid servings per day, by selected demographic characteristics, 2-day average, 1994 - 1996

Demographics	Percentage of Population	Percentage of Individuals	
		Consuming less than 1 serving a day	Consuming at least Minimum Number of Servings Recommended (3 a Day)
	Percent	*Percent*	
Region			
Northeast	21.2	13.1	47.4
Midwest	20.4	14.3	41.4
South	51.3	14.2	42.0
West	7.0	12.7	33.3
Urbanization			
Central city	65.6	13.4	44.0
Suburban	24.1	12.3	43.0
Rural	10.3	20.6	31.0
Food stamp usage			
Yes	27.6	18.0	34.4
No	69.3	12.5	45.8
Missing	3.1	9.1	39.1
Education level			
Less than high school	46.8	16.5	36.5
High school	28.7	12.8	45.4
Above high school	23.0	10.4	50.6
Not ascertained	1.5	7.3	43.5
% of poverty category			
0-130	37.4	17.1	38.3
131-350	43.4	12.2	44.2
Over 350	19.2	11.6	46.3
Body mass index			
Less than 25.0	45.5	13.1	40.6
Greater or equal to 25.0	54.5	14.6	43.9
All individuals			
2 and over	100.0	13.9	42.4

The data have been adjusted for children ages 2-5 years because children at this age may have lower energy needs. For children age 2-5 years who consumed less than 1,600 calories per day, one serving has been calculated as two-thirds of a standard serving size to allow for their lower energy needs.

Source: USDA CSFII, 1994 - 1996

Table 18

Vegetable group: Mean numbers of Pyramid servings consumed by African Americans per day, by selected demographic characteristics, 2-day average, 1994 - 1996

Demographics	Percentage of Population	Total Vegetables	Dark Green Leafy Vegetables	Deep Yellow Vegetables	Cooked Dry Beans & Peas	Starchy Vegetables		Tomatoes	Other Vegetables
						White Potatoes	Other Starchy		
	Percent	*Servings*							
Region									
Northeast	21.2	3.3	0.3	0.2	0.2	0.9	0.3	0.5	1.0
Midwest	20.4	3.1	0.2	0.1	0.2	1.4	0.2	0.3	0.7
South	51.3	3.0	0.3	0.1	0.2	1.1	0.2	0.4	0.7
West	7.0	3.0	0.2	0.2	0.2	1.1	0.1	0.4	0.8
Urbanization									
Central city	65.6	3.1	0.3	0.1	0.2	1.1	0.3	0.4	0.9
Suburban	24.1	3.1	0.2	0.1	0.2	1.3	0.2	0.4	0.8
Rural	10.3	2.5	0.2	0.1	0.2	1.0	0.2	0.4	0.5
Food stamp usage									
Yes	27.6	2.7	0.2	0.1	0.2	1.1	0.2	0.3	0.6
No	69.3	3.2	0.3	0.1	0.2	1.1	0.2	0.4	0.9
Missing	3.1	3.0	0.1	0.1	0.1	1.0	0.2	0.4	1.1
Education level									
Less than high school	46.8	2.8	0.3	0.1	0.2	1.1	0.2	0.3	0.7
High school	28.7	3.2	0.2	0.1	0.2	1.1	0.3	0.4	0.8
Above high school	23.0	3.5	0.3	0.2	0.2	1.1	0.2	0.4	1.1
Not ascertained	1.5	3.2	0.2	0.2	0.4	0.9	0.2	0.5	0.9
% of poverty category									
0-130	37.4	2.9	0.3	0.1	0.2	1.1	0.2	0.4	0.7
131-350	43.4	3.0	0.3	0.1	0.2	1.1	0.3	0.4	0.8
Over 350	19.2	3.4	0.2	0.2	0.1	1.3	0.2	0.4	1.0
Body mass index									
Less than 25.0	45.5	3.0	0.2	0.1	0.2	1.2	0.2	0.4	0.7
Greater or equal to 25.0	54.5	3.1	0.3	0.1	0.2	0.4	0.9	1.4	0.9
All individuals									
2 and over	100.0	3.1	0.2	0.1	0.2	1.1	0.2	0.4	0.8

The data have been adjusted for children ages 2-5 years because children at this age may have lower energy needs. For children age 2-5 years who consumed less than 1,600 calories per day, one serving has been calculated as two-thirds of a standard serving size to allow for their lower energy needs.

Source: USDA CSFII, 1994 - 1996

Sex & Age (in Years)	Percentage of Population	Percentage of Individuals	
		Consuming less than 1 serving a day	Consuming at least 2 servings a day
	Percent	*Percent*	
Males:			
2-5	4.4	21.6	28.1
6-11	5.5	22.2	33.7
12-19	6.3	34.7	29.6
20-39	13.2	57.7	21.5
40-59	10.4	71.0	9.8
60 and over	5.5	68.8	11.2
20 and over	29.0	64.6	15.4
Females:			
2-5	4.3	27.3	30.6
6-11	6.1	29.7	25.1
12-19	8.3	53.6	13.7
20-39	17.3	70.7	6.5
40-59	10.6	78.3	7.3
60 and over	8.2	76.6	6.5
20 and over	36.1	74.3	6.7
All individuals			
2 and over	100.0	57.3	15.9

The data have been adjusted for children ages 2-5 years because children at this age may have lower energy needs. For children age 2-5 years who consumed less than 1,600 calories per day, one serving has been calculated as two-thirds of a standard serving size to allow for their lower energy needs.

Table 19

Dairy group: Percentage of African Americans consuming specified numbers of Pyramid servings per day, by age and sex, 2-day average, 1994 - 1996

Source: USDA CSFII, 1994 - 1996

Table 20

Dairy group: Mean numbers of Pyramid servings consumed by African Americans per day, by age and sex, 2-day average, 1994 - 1996

Sex & Age (in Years)	Percentage of Population	Total Dairy	Milk	Yogurt	Cheese
	Percent		*Servings*		
Males:					
2-5	4.4	1.6	1.3	*	0.3
6-11	5.5	1.7	1.3	0.0	0.4
12-19	6.3	1.7	1.1	0.0	0.6
20-39	13.2	1.5	0.8	*	0.7
40-59	10.4	0.9	0.6	0.0	0.3
60 and over	5.5	0.8	0.7	*	0.1
20 and over	29.0	1.2	0.7	*	0.4
Females:					
2-5	4.3	1.6	1.3	*	0.2
6-11	6.1	1.5	1.1	*	0.3
12-19	8.3	1.1	0.7	*	0.5
20-39	17.3	0.8	0.5	*	0.4
40-59	10.6	0.7	0.4	*	0.2
60 and over	8.2	0.7	0.6	*	0.1
20 and over	36.1	0.8	0.5	*	0.3
All individuals					
2 and over	100.0	1.1	0.7	*	0.4

* Value less than 0.05 but greater than 0.0

Source: USDA CSFII 1994 - 1996

Sex & Age (in Years)	Percentage of Population	Food Energy	Protein	Total Fat	Saturated Fatty Acids	Mono-unsaturated Fatty Acids	Poly-unsaturated Fatty Acids	Cholesterol	Total Carbo-hydrate	Dietary Fiber
	Percent	*Kilo-Calories*	*Grams*					*Milligrams*	*Grams*	
Males & Females:										
1-2	3.9	1,350	49.4	51.1	19.8	19.1	8.4	195	177.4	6.2
3-5	6.4	1,586	57.7	60.0	22.2	23.2	10.1	205	208.6	7.7
5 and under §	11.8	1,432	51.2	55.3	21.1	20.8	9.4	186	186.4	6.6
Males:										
6-11	5.3	1,896	68.8	73.2	26.6	29.0	12.2	252	245.4	8.6
12-19	6.1	2,545	92.4	101.0	35.4	39.8	18.2	335	322.1	9.8
20-39	12.7	3,012	121.8	123.9	44.5	47.6	22.3	471	335.4	11.3
40-59	10.0	2,217	93.0	86.6	27.8	34.5	17.1	382	261.2	10.9
60 and over	5.3	1,677	71.1	63.5	20.7	24.5	12.9	328	205.5	10.0
20 and over	28.0	2,478	102.0	99.2	34.1	38.6	18.7	413	284.6	15.6
Females:										
6-11	5.9	1,698	60.3	64.9	23.5	25.0	11.5	213	223.4	7.5
12-19	8.0	1,878	69.3	74.5	26.2	29.1	13.5	255	236.7	8.1
20-39	16.7	1,737	66.3	67.1	22.3	26.5	13.0	237	216.7	8.0
40-59	10.3	1,596	65.6	63.5	20.3	24.1	14.0	265	191.1	8.5
60 and over	7.9	1,289	53.9	47.8	15.5	18.2	10.3	223	163.7	8.1
20 and over	34.9	1,594	63.3	61.7	20.2	23.9	12.7	243	197.2	11.3
All individuals	100.0	1,925	75.1	75.7	26.1	29.3	14.3	289	235.2	8.8

§ Includes infants under age 1; excludes breast-fed children

Table 21a

Nutrient intakes: Mean amounts consumed per individual among African Americans by age and sex, 2-day average, 1994 - 1996

. . . continued –

Table 21b

Nutrient intakes: Mean amounts consumed per individual among African Americans by age and sex, 2-day average, 1994 - 1996

. . . continued –

Sex & Age (in Years)	Vitamin A	Carotenes	Vitamin E	Vitamin C	Thiamin	Ribo-flavin	Niacin	Vitamin B6	Folate	Vitamin B12
	Micrograms retinol --- equivalents ---		*Milligrams alfa-tocopherol --- equivalents ---*	*Milligrams*					*Micrograms*	
Males & Females:										
1-2	633	189	4.9	96	1.12	1.55	13.6	1.26	175	3.32
3-5	771	223	5.1	101	1.39	1.77	17.3	1.49	224	3.97
5 and under §	751	212	6.1	100	1.25	1.67	15.2	1.31	196	3.73
Males:										
6-11	737	223	6.2	94	1.58	1.91	20.0	1.61	230	3.69
12-19	786	281	8.6	120	2.01	2.21	26.6	2.03	267	5.30
20-39	919	347	9.9	126	2.13	2.51	31.6	2.29	270	12.35
40-59	945	507	8.4	113	1.72	1.81	24.7	1.93	258	5.43
60 and over	1,324	597	6.7	98	1.46	1.75	20.2	1.76	253	6.05
20 and over	1,006	452	8.8	116	1.86	2.11	27.0	2.06	265	8.7
Females:										
6-11	779	297	5.9	102	1.44	1.73	17.8	1.44	219	4.26
12-19	591	235	6.4	97	1.40	1.60	19.2	1.47	202	3.87
20-39	646	294	6.2	91	1.28	1.39	18.8	1.41	187	4.08
40-59	806	440	6.7	95	1.19	1.31	17.7	1.38	190	3.86
60 and over	1,007	630	5.6	97	1.12	1.30	15.2	1.30	191	3.86
20 and over	775	413	6.2	93	1.22	1.34	17.7	1.37	189	3.97
All individuals	821	360	7.1	103	1.50	1.72	20.8	1.62	221	5.34

§ Includes infants under age 1; excludes breast-fed children

Sex & Age (in Years)	Calcium	Phosphorus	Magnesium	Iron	Zinc	Copper	Sodium	Potassium
	Milligrams							
Males & Females:								
1-2	708	880	175	11.9	8.2	0.7	2,165	1,838
3-5	737	988	192	13.3	9.1	0.8	2,557	1,933
5 and under §	738	910	176	13.4	8.7	0.8	2,185	1,818
Males:								
6-11	808	1,133	210	14.3	10.0	0.9	3,127	2,094
12-19	914	1,415	261	17.5	12.9	1.2	4,154	2,710
20-39	971	1,665	304	21.7	18.1	1.4	5,144	3,273
40-59	643	1,293	273	16.2	12.5	1.3	3,662	2,760
60 and over	605	1,030	227	14.5	10.2	1.1	2,914	2,298
20 and over	786	1,414	278	18.4	14.6	1.3	4,196	2,908
Females:								
6-11	697	1,001	190	13.0	9.3	0.9	2,767	1,963
12-19	612	1,019	198	13.2	10.2	1.0	3,161	2,074
20-39	529	948	189	11.8	9.5	0.9	2,904	1,989
40-59	499	916	209	10.7	8.3	1.0	2,625	2,098
60 and over	482	789	182	10.5	7.6	0.9	2,236	1,870
20 and over	509	902	193	11.2	8.7	0.9	2,670	1,994
All individuals	673	1,105	220	14.3	10.8	1.0	3,200	2,282

§ Includes infants under age 1; excludes breast-fed children

Source: USDA CSFII, 1994 - 1996

Table 21c

Nutrient intakes: Mean amounts consumed per individual among African Americans by age and sex, 2-day average, 1994 - 1996

Table 22

Dairy group: Mean numbers of Pyramid servings consumed by African Americans per day, by selected demographic characteristics, 2-day average, 1994 - 1996

Demographics	Percentage of Population	Total Dairy	Milk	Yogurt	Cheese
	Percent	*Servings*			
Region					
Northeast	21.2	1.4	0.9	*	0.5
Midwest	20.4	1.1	0.8	*	0.3
South	51.3	1.0	0.7	*	0.3
West	7.0	1.3	0.9	*	0.4
Urbanization					
Central city	65.6	1.2	0.8	*	0.4
Suburban	24.1	1.2	0.8	*	0.4
Rural	10.3	1.0	0.6	*	0.3
Food stamp usage					
Yes	27.6	1.2	0.9	*	0.3
No	69.3	1.1	0.7	*	0.4
Missing	3.1	0.9	0.7	*	0.2
Education level					
Less than high school	46.8	1.4	1.0	*	0.4
High school	28.7	0.9	0.5	*	0.4
Above high school	23.0	0.9	0.5	*	0.3
Not ascertained	1.5	1.4	1.0	*	0.4
% of poverty category					
0-130	37.4	1.3	0.9	*	0.4
131-350	43.4	1.0	0.7	*	0.3
Over 350	19.2	1.0	0.6	*	0.4
Body mass index					
Less than 25.0	45.5	1.2	0.9	*	0.4
Greater or equal to 25.0	54.5	1.0	0.7	*	0.4
All individuals					
2 and over	100.0	1.1	0.7	*	0.4

* Value less than 0.05 but greater than 0.0

Source: USDA CSFII, 1994 - 1996

Demographics	Percentage of Population	Percentage of Individuals	
		Consuming less than 1 Serving a Day	Consuming at least 2 Servings a Day
	Percent	*Percent*	
Region			
Northeast	21.2	51.6	21.1
Midwest	20.4	53.6	13.2
South	51.3	62.5	14.1
West	7.0	46.9	20.0
Urbanization			
Central city	65.6	57.6	15.7
Suburban	24.1	54.5	17.4
Rural	10.3	62.2	13.0
Food stamp usage			
Yes	27.6	48.6	19.2
No	69.3	60.1	14.7
Missing	3.1	71.5	10.6
Education level			
Less than high school	46.8	44.0	22.6
High school	28.7	69.8	8.4
Above high school	23.0	68.6	10.2
Not ascertained	1.5	57.4	31.6
% of poverty category			
0-130	37.4	49.1	20.2
131-350	43.4	61.6	12.6
Over 350	19.2	63.5	14.6
Body mass index			
Less than 25.0	45.5	49.2	19.4
Greater or equal to 25.0	54.5	64.0	12.8
All individuals			
2 and over	100.0	57.3	15.9

Source: USDA CSFII, 1994 - 1996

Table 23

Dairy group: Percentage of African Americans consuming specified numbers of Pyramid servings per day, by selected demographic characteristics, 2-day average, 1994 - 1996

Table 24

Perceived diet quality in terms of calcium: self assessment of nutrient intake among African Americans 20 years of age and older, by selected demographic characteristics, 1994 - 1996

Demographics	Percentage of Population	Too Low	Too High	About Right	Don't Know	Not Ascertained
			Percent			
Region						
Northeast	22.7	25.5	7.3	60.4	6.8	0.0
Midwest	20.8	41.4	3.9	49.2	5.2	0.3
South	49.9	30.7	4.7	58.8	4.8	1.0
West	6.6	22.5	0.4	77.1	0.0	0.0
Urbanization						
Central city	66.5	28.9	4.5	59.6	6.6	0.4
Suburban	24.4	33.8	2.7	61.0	1.3	1.2
Rural	9.2	40.9	13.2	42.5	3.4	0.0
Food stamp usage						
Yes	21.2	35.5	6.5	50.2	7.6	0.2
No	77.8	30.2	4.5	60.3	4.4	0.7
Missing	1.0	21.4	0.0	78.6	0.0	0.0
Education level						
Less than high school	22.7	21.2	10.5	55.0	12.4	1.0
High school	40.6	28.1	3.7	62.9	4.6	0.6
Above high school	35.0	41.4	2.6	55.3	0.5	0.2
Not ascertained	1.7	29.4	3.4	57.6	9.5	0.0
% of poverty category						
0-130	33.0	32.5	7.3	53.0	7.1	0.1
131-350	44.0	26.2	3.7	63.5	5.9	0.7
Over 350	23.0	38.9	3.6	56.2	0.5	0.9
Body mass index						
Less than 25.0	27.0	34.5	1.6	58.7	3.6	1.6
Greater or equal to 25.0	73.0	30.0	6.1	58.2	5.6	0.2
All individuals	100.0	31.2	4.9	58.4	5.0	0.5

Source: USDA Diet and Health Knowledge Survey, 1994 - 1996

Table 25

Perceived importance of dietary guidance: eat at least two servings of dairy products daily among African Americans 20 years of age and older, by selected demographic characteristics, 1994 - 1996

Demographics	Percentage of Population	Very Important	Somewhat Important	Not too important	Not at all Important	Don't Know	Not Ascertained
		Percent					
Region							
Northeast	22.7	45.6	22.8	19.8	9.4	2.3	0.0
Midwest	20.8	41.0	26.7	21.7	9.0	1.3	0.2
South	49.9	33.4	28.9	29.7	7.0	0.9	0.2
West	6.6	41.0	42.3	11.3	4.5	1.0	0.0
Urbanization	66.5	35.4	27.7	26.7	8.6	1.7	0.0
Central city	24.4	43.9	29.3	18.8	7.8	0.0	0.2
Suburban	9.2	44.2	25.7	24.9	2.4	1.9	0.8
Rural							
Food stamp usage	21.2	40.1	30.9	20.1	6.2	2.7	0.0
Yes	77.8	37.6	26.8	26.2	8.4	1.0	0.2
No	1.0	45.1	48.8	6.1	0.0	0.0	0.0
Missing							
Education level	22.7	36.7	25.9	27.3	6.7	3.4	0.0
Less than high school	40.6	42.3	28.9	19.3	8.7	0.7	0.2
High school	35.0	36.3	26.4	28.6	7.8	0.8	0.1
Above high school	1.7	3.4	61.6	31.8	3.2	0.0	0.0
Not ascertained							
% of poverty category	33.0	40.3	27.6	24.6	5.0	2.1	0.4
0-130	44.0	37.1	24.6	26.1	10.8	1.4	0.0
131-350	23.0	37.5	34.8	21.7	6.0	0.0	0.0
Over 350							
Body mass index	27.0	41.4	31.0	21.5	5.1	0.9	0.2
Less than 25.0	73.0	37.1	26.8	25.7	8.8	1.5	0.1
Greater or equal to 25.0							
All individuals	100.0	38.3	27.9	24.6	7.8	1.3	0.1

Source: USDA Diet and Health Knowledge Survey, 1994 - 96

Table 26

Percentage of dairy products consumed as a source of calcium, among African Americans by age and sex, 2-day intake, 1994 - 1996

Sex & Age (in Years)	Milk, Milk Drinks, Yogurt							Milk Desserts	Cheese	Other Dairy Products
	Total Milk & Yogurt	Total Fluid Milk	Whole Milk	Low Fat Milk	Skim Milk	Milk Drinks	Yogurt			
	Percent									
Males & Females:										
2 years	90.7	88.4	73.0	12.9	0.7	2.3	0.0	7.2	2.1	0.0
3-5 years	92.7	87.4	66.9	16.6	1.6	4.4	1.0	4.4	2.7	0.2
2 to 5 years	92.3	87.6	68.3	15.8	1.4	3.9	0.7	5.0	2.5	0.2
Males:										
6-11	89.9	79.7	54.7	20.4	3.5	10.3	0.0	7.7	2.4	0.0
12-19	86.4	69.1	48.9	15.0	0.4	17.4	0.0	9.0	4.4	0.1
20-39	76.3	39.9	26.1	13.3	0.6	36.1	0.3	12.4	9.5	1.9
40-59	71.9	66.5	34.8	15.3	12.3	5.4	0.0	21.0	6.0	1.1
60 +	85.7	71.0	34.7	29.8	50.0	12.9	1.8	9.6	2.2	2.5
Females:										
6-11	89.8	73.4	49.2	17.4	2.6	15.0	1.4	7.4	2.8	0.0
12-19	79.7	62.6	44.9	11.8	5.5	16.9	0.2	12.2	7.6	0.5
20-39	79.6	68.5	51.4	8.6	8.1	6.5	4.6	11.1	7.7	1.6
40-59	71.5	59.9	33.8	17.2	8.1	6.3	5.3	19.1	7.0	2.4
60 +	83.1	75.4	30.5	30.7	12.5	5.4	2.3	13.1	2.9	0.9
All individuals	82.8	67.4	44.7	16.4	4.5	14.1	1.3	11.0	5.3	1.0

Table 27

Percentage of calcium eaten from different food groups among African Americans by age and sex, 2-day intake, 1994 - 1996

Sex & Age (in Years)	Percentage of Population	Milk & Milk Products	Meat, Poultry, Fish & Mixtures	Eggs	Legumes, Nuts & Seeds	Grain Products	Fruits	Vegetables	Fats, Oils & Salad Dressings	Sugar, Sweets & Beverages
	Percent	Percent								
Males & Females:										
Under one year:	1.7	80.2	1.1	1.3	0.3	12.0	1.9	2.7	0.02	0.4
1-2	3.9	56.3	6.3	2.0	1.4	22.3	4.6	3.7	0.1	3.3
3 to 5	6.2	52.2	7.2	1.7	0.9	26.2	3.4	3.9	0.1	4.3
Males:										
6-11	5.4	48.5	9.0	0.8	1.5	29.4	2.1	3.3	0.1	5.3
12-19	6.3	37.6	11.5	3.2	1.1	32.4	2.1	5.8	0.3	5.9
20-39	12.3	24.6	18.8	3.0	1.4	29.2	1.9	10.9	0.9	9.3
40-59	10.4	23.6	16.0	5.0	2.7	28.3	3.1	10.4	0.3	10.4
60 and over	5.3	25.1	13.5	5.3	3.5	28.3	4.2	14.6	0.3	5.2
Females:										
6-11	6.2	42.8	10.3	1.0	1.3	32.4	2.4	3.9	0.4	5.5
12-19	7.4	31.5	14.1	2.0	2.0	34.8	2.2	7.0	0.5	5.9
20-39	16.9	24.1	16.8	2.8	1.3	32.0	3.4	9.2	0.8	9.6
40-59	10.1	25.0	13.3	3.5	2.3	28.3	4.3	13.8	0.7	8.7
60 and over	7.9	28.1	10.2	4.5	2.6	28.9	4.4	16.1	0.4	4.9
All individuals	100.0	32.4	13.3	3.0	1.8	29.5	3.1	9.2	0.5	7.2

Table 28

Meat group: Percentage of Individuals consuming specified numbers of Pyramid servings by African Americans per day, by age and sex, 2-day average, 1994 - 1996

Sex & Age (in Years)	Percentage of Population	Percentage of Individuals	
		Consuming less than 1 Ounce Equivalent a Day	Consuming at least 5 Ounce Equivalents a Day
	Percent	*Percent*	
Males:			
2-5	4.4	2.7	17.1
6-11	5.5	2.7	36.2
12-19	6.3	1.2	59.7
20-39	13.2	0.7	74.7
40-59	10.4	2.2	71.1
60 and over	5.5	0.9	48.7
20 and over	29.0	1.2	68.5
Females:			
2-5	4.3	3.7	12.9
6-11	6.1	1.6	21.2
12-19	8.3	2.7	45.7
20-39	17.3	3.5	38.0
40-59	10.6	1.3	41.9
60 and over	8.2	6.8	25.8
20 and over	36.1	3.6	36.4
All individuals			
2 and over	100.0	2.5	45.1

Source: USDA CSFII, 1994 - 1996

Table 29

Meat group: Mean number of Pyramid servings consumed by African Americans per day, by age and sex, 2-day average, 1994 - 1996

Sex & Age (in Years)	Percentage of Population	Total Meat & Alternates	Meat	Poultry	Fish	Organ Meat	Frankfurter & Lunch Meat	Eggs	Soybean Products	Nuts & Seeds
	Percent	Ounces cooked lean meat equivalents								
Males:										
2-5	4.4	3.4	0.9	1.1	0.2	*	0.9	0.3	*	0.1
6-11	5.5	4.3	1.3	1.2	0.3	*	1.1	0.3	*	0.2
12-19	6.3	6.3	2.5	1.7	0.4	0.0	1.1	0.4	*	0.1
20-39	13.2	9.7	3.9	2.3	0.7	*	2.2	0.6	*	*
40-59	10.4	7.2	2.8	1.9	0.7	0.1	0.9	0.7	*	0.2
60 and over	5.5	5.3	1.9	1.4	0.5	0.1	0.6	0.7	*	0.1
20 and over	29.0	8.0	3.1	2.0	0.7	0.1	1.4	0.7	*	0.1
Females:										
2-5	4.3	3.4	1.0	0.9	0.2	*	0.8	0.3	*	0.2
6-11	6.1	3.7	1.3	0.9	0.3	*	0.8	0.2	*	0.1
12-19	8.3	4.8	2.0	1.2	0.2	*	0.9	0.4	*	0.1
20-39	17.3	4.9	1.8	1.5	0.4	*	0.8	0.3	*	0.1
40-59	10.6	5.0	1.6	1.5	0.7	0.1	0.6	0.5	*	0.1
60 and over	8.2	3.9	1.2	1.1	0.5	*	0.5	0.5	*	0.1
20 and over	36.1	4.7	1.6	1.4	0.5	*	0.7	0.4	*	0.1
All individuals										
2 and over	100.0	5.6	2.0	1.5	0.5	*	1.0	0.4	*	0.1

* Value less than 0.05 but greater than 0.0

Source: USDA CSFII, 1994 - 1996

Table 30

Meat group: Percentage of African Americans consuming specified numbers of Pyramid servings per day, by selected demographic characteristics, 2-day average, 1994 - 1996

Demographics	Percentage of Population	Percentage of Individuals	
		Consuming less than 1 Ounce Equivalent a Day	Consuming at least 5 Ounce Equivalents a Day
	Percent	*Percent*	
Region			
Northeast	21.2	2.4	51.2
Midwest	20.4	1.4	49.0
South	51.3	3.0	41.3
West	7.0	2.2	43.6
Urbanization			
Central city	65.6	1.6	46.7
Suburban	24.1	4.3	42.8
Rural	10.3	3.8	40.7
Food stamp usage			
Yes	27.6	1.5	42.4
No	69.3	3.0	46.2
Missing	3.1	0.0	46.9
Education level			
Less than high school	46.8	2.4	36.5
High school	28.7	2.4	56.1
Above high school	23.0	2.9	48.7
Not ascertained	1.5	0.0	50.9
% of poverty category			
0-130	37.4	1.4	45.3
131-350	43.4	3.2	41.2
Over 350	19.2	3.0	53.7
Body mass index			
Less than 25.0	45.5	2.0	44.4
Greater or equal to 25.0	54.5	2.9	45.8
All individuals			
2 and over	100.0	2.5	45.1

Source: USDA CSFII, 1994 - 1996

Table 31

Meat group: Mean numbers of Pyramid servings consumed by African Americans per day, by selected demographic characteristics, 2-day average, 1994 - 1996

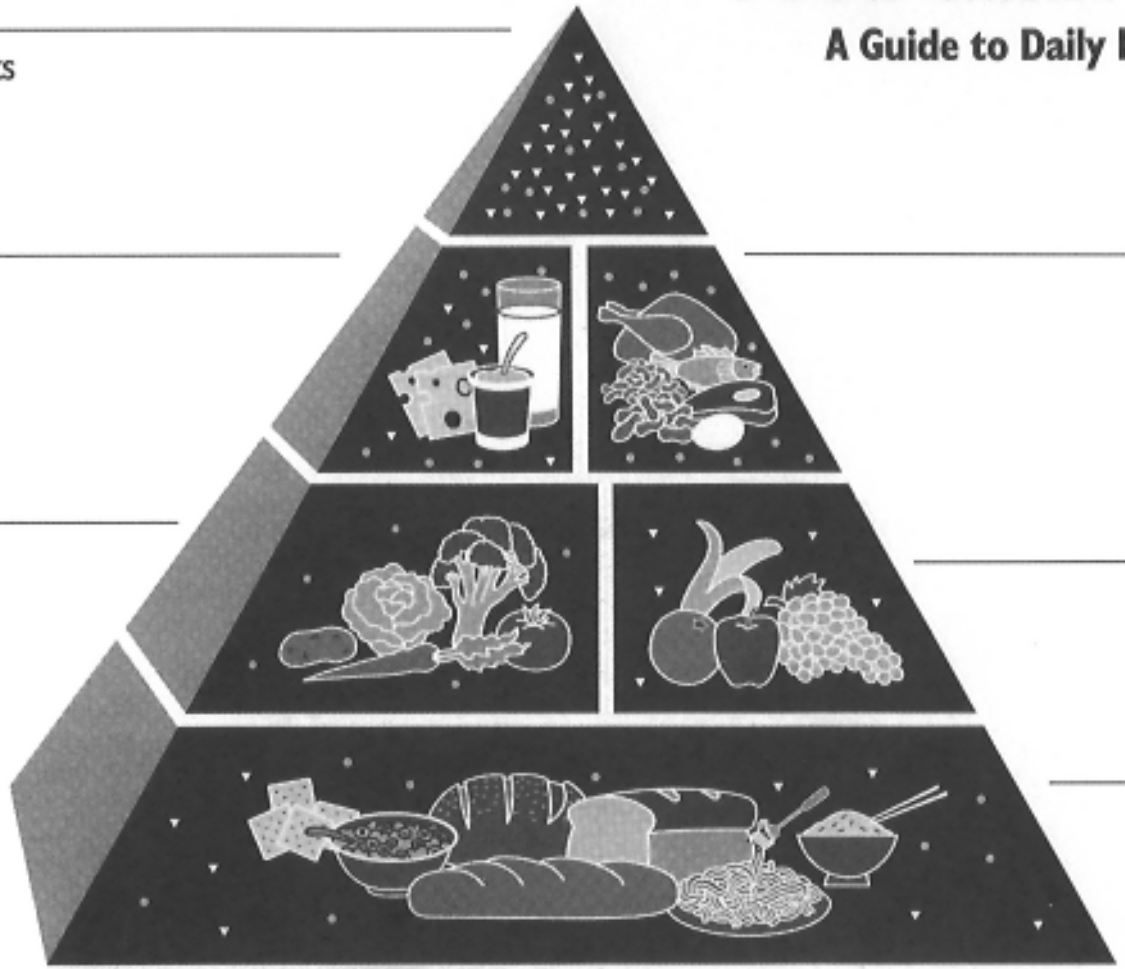
Demographics	Percentage of Population	Total Meat & Alternates	Meat	Poultry	Fish	Organ Meat	Frankfurter & Lunch Meat	Eggs	Soybean Products	Nuts & Seeds
	Percent	*Ounces cooked lean meat equivalents*								
Region										
Northeast	21.2	7.1	2.7	1.9	0.6	*	1.3	0.4	0.0	0.1
Midwest	20.4	5.4	2.1	1.4	0.3	0.1	0.9	0.5	*	0.1
South	51.3	5.1	1.8	1.3	0.5	*	0.9	0.4	*	0.1
West	7.0	5.1	1.8	1.4	0.5	*	0.8	0.5	*	0.1
Urbanization										
Central city	65.6	5.8	2.2	1.5	0.5	*	1.1	0.5	*	0.1
Suburban	24.1	5.0	1.8	1.4	0.4	*	0.8	0.4	*	0.1
Rural	10.3	5.1	1.9	1.4	0.4	*	1.0	0.4	*	0.1
Food stamp usage										
Yes	27.6	5.2	1.9	1.4	0.4	*	1.0	0.5	*	0.1
No	69.3	5.7	2.1	1.5	0.5	*	1.0	0.4	*	0.1
Missing	3.1	4.9	1.8	1.1	0.6	0.0	0.9	0.5	*	*
Education level										
Less than high school	46.8	5.2	1.9	1.3	0.4	*	1.1	0.4	*	0.1
High school	28.7	6.3	2.4	1.6	0.6	*	1.0	0.6	*	0.1
Above high school	23.0	5.4	1.9	1.7	0.5	*	0.6	0.4	*	0.1
Not ascertained	1.5	6.0	2.0	1.9	0.4	0.0	1.3	0.4	0.0	0.1
% of poverty category										
0-130	37.4	6.0	2.3	1.4	0.4	*	1.3	0.5	*	0.1
131-350	43.4	5.2	1.8	1.5	0.4	*	0.9	0.4	*	0.1
Over 350	19.2	5.7	2.1	1.6	0.7	*	0.7	0.5	*	0.1
Body mass index										
Less than 25.0	45.5	5.3	2.0	1.5	0.4	*	0.9	0.4	*	0.1
Greater or equal to 25.0	54.5	5.8	2.1	1.5	0.6	*	1.1	0.5	*	0.1
All individuals										
2 and over	100.0	5.6	2.0	1.5	0.5	*	1.0	0.4	*	0.1

* Value less than 0.05 but greater than 0.0

Source: USDA CSFII, 1994 - 1996

Food Guide Pyramid

A Guide to Daily Food Choices



SOURCE: U.S. Department of Agriculture/U.S. Department of Health and Human Services

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Table 31

Meat group: Mean numbers of Pyramid servings consumed by African Americans per day, by selected demographic characteristics, 2-day average, 1994 - 1996

Demographics	Percentage of Population	Total Meat & Alternates	Meat	Poultry	Fish	Organ Meat	Frankfurter & Lunch Meat	Eggs	Soybean Products	Nuts & Seeds
	Percent	*Ounces cooked lean meat equivalents*								
Region										
Northeast	21.2	7.1	2.7	1.9	0.6	*	1.3	0.4	0.0	0.1
Midwest	20.4	5.4	2.1	1.4	0.3	0.1	0.9	0.5	*	0.1
South	51.3	5.1	1.8	1.3	0.5	*	0.9	0.4	*	0.1
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Urbanization										
Central city	65.6	5.8	2.2	1.5	0.5	*	1.1	0.5	*	0.1
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Food stamp usage										
Yes	27.6	5.2	1.9	1.4	0.4	*	1.0	0.5	*	0.1
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Education level										
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High school	28.7	6.3	2.4	1.6	0.6	*	1.0	0.6	*	0.1
Above high school	23.0	5.4	1.9	1.7	0.5	*	0.6	0.4	*	0.1
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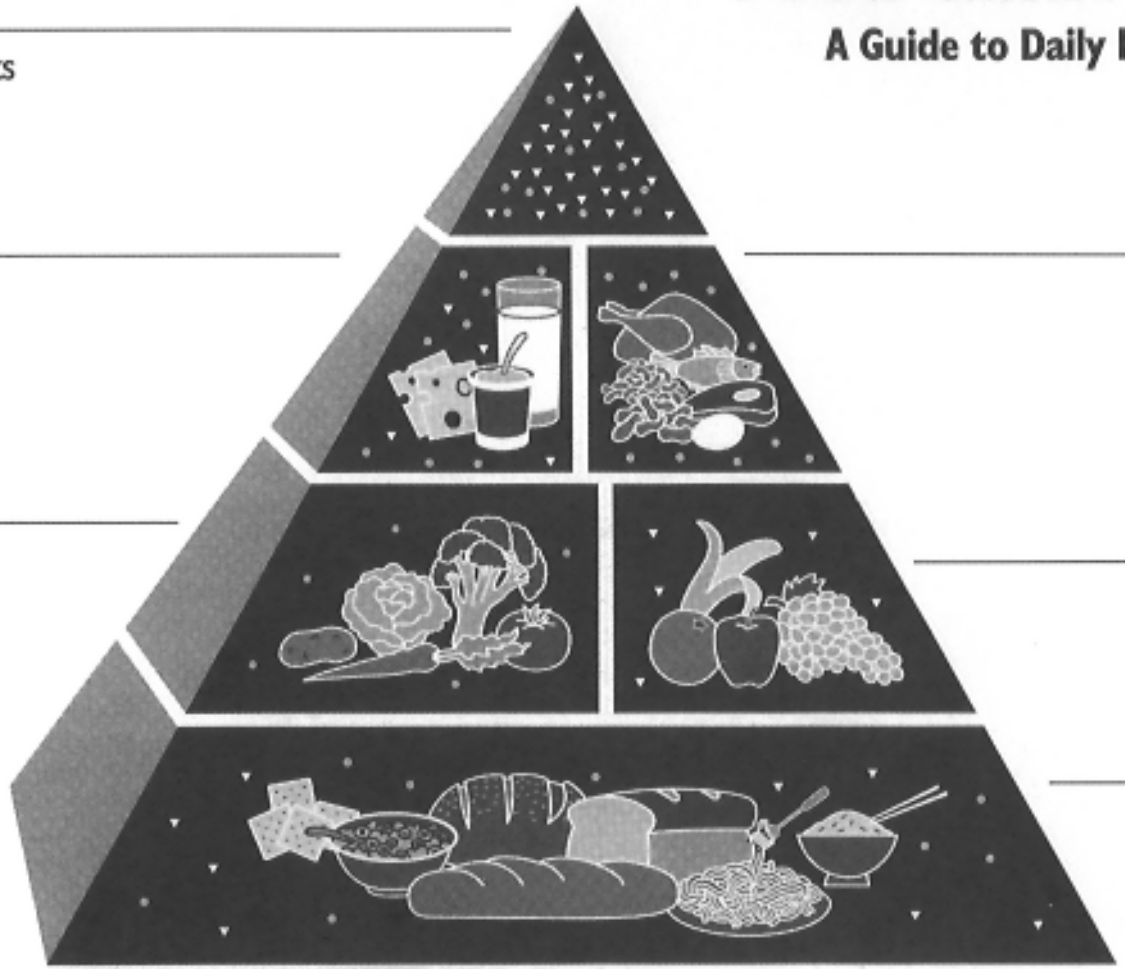

SOURCE: U.S. Department of Agriculture/U.S. Department of Health and Human Services

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