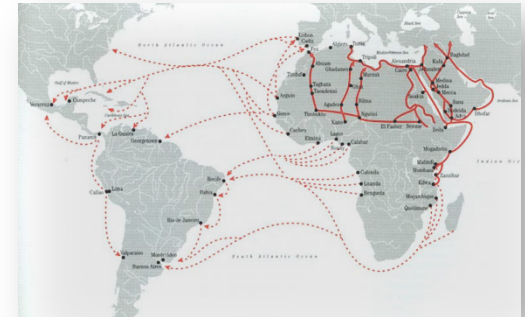


# African American Health Through Heritage: Dietary Traditions Worth Reclaiming

For over twenty years, Oldways has researched and promoted the traditional eating patterns of various cultures around the world, starting with the Mediterranean.

To help combat increasing obesity, diabetes, and other diet-related chronic diseases in the African American population today, Oldways gathered a committee of experts in African diasporan foodways, nutrition, and culinary history to explore interdisciplinary solutions. *\*Complete list of committee members can be found in the CPE Webinar and Oldways website.*



We found that, much like the long-studied traditional Mediterranean Diet, the traditional diets of the African diaspora are high-quality eating models, naturally mirroring modern nutritional recommendations such as the USDA 2010 Dietary Guidelines.

Reconnecting to these early dietary patterns—low in refined sugars, unhealthy fats, sodium, and calories, and rich in nutrient-dense, flavorful foods—could powerfully benefit African descendants everywhere.

# Creating the African Heritage Diet

**Oldways' distinguished committee explored questions such as:**

- How did African ancestors eat in the past?
- What were common traditional eating patterns of the African diaspora?
- What was the health profile of African diasporan ancestors?
- What foods and traditions traveled to the U.S. from different parts of the African diaspora?
- What is the nutrition situation across the African diaspora today?
- What are the rates of non-communicable diseases (NCDs) in African heritage groups that have maintained the traditional diet?
- How does the modern American diet differ from the traditional eating patterns of African heritage?
- How do African Americans eat today?
- Could these eating patterns be contributing to chronic disease among African Americans today?

**... and answered with the information provided on the following pages and in the African Heritage Diet Webinar.**

# Mortality Incidence of NCDs in Africa and the U.S., 2010

Condition	Africa (males)	U.S. (males) *	Africa (females)	U.S. (females)*
<b>NCDs Total</b>	24%	84.3%	25.8%	89.4%
<b>CVD</b>	9.2%	35.1%	11.7%	38.3%
<b>Cancer</b>	4.3%	24.6%	4.2%	22.1%
<b>Diabetes</b>	1.2%	3%	1.9%	3.1%
<b>Overweight &amp; Obesity BMI ≥ 25</b>	Zambia: 8.3% Mali: 17.1% Ghana: 35.6%	80.5%	Zambia: 20.0% Mali: 38.4% Ghana: 32.5%	76.7%
<b>Other NCDs</b>	6.1%	14.5%	5.6%	18.8%

\*All ethnicities

Source: World Health Organization

# Mortality Incidence of NCDs in Africa and the U.S., 2010

## WHO Data from 2008 and 2010

- To this day, African has some of the lowest non-communicable disease rates in the world. Diet-related NCDs like obesity, heart disease, and diabetes are remarkably lower in male and female Africans (across the continent) than male and female Americans.
- Research shows that as nutrition transitions take place in urbanized areas of Africa – where traditional eating patterns are being replaced by more urban, modern eating patterns – these NCD rates increase.

## Overweight & Obesity Profile Note:

Because no comprehensive data exists on the BMI status of Africa as one unit, we chose three countries on the African Continent that represent the state of nutrition transitions happening throughout the continent today. Note that much of Africa struggles with *under-nutrition* from lack of crop-diversity from war, climate changes, and the resultant loss of over 2,000 traditional foodstuffs and land across the continent.

- **Zambia:** Zambia, in south-central Africa, represents regions not yet affected by nutrition shifts toward a more “Western” diet. The Zambian population has been severely affected by HIV/AIDS pandemics, while non-communicable disease rates are remarkably low. The diet here mainly consists of cereals (maize and rice), starchy roots and sweet potatoes, and fruits and vegetables. Cereals provide almost 2/3 of the dietary energy supply.
- **Mali:** Mali, a landlocked country in West Africa, has a population that is predominantly young and rural. Mali represents the beginning stages of a nutrition shift, predominantly in the urban sections. The rural diet is based mainly on whole cereals (millet, rice, sorghum, and maize). Pulses like cowpeas (black-eyed peas), starchy roots (sweet potatoes, yams, cassava), and fruits and vegetables make up the rest of the diet.
- **Ghana:** Ghana, in coastal West Africa, is experiencing more advanced levels of nutrition shift and physical activity decreases, especially in its large urban population. “With rapid urbanization, the demand for imported foods has increased, especially for wheat and rice, causing a shift in consumption patterns of the urban population. The consumption of poultry meat, wheat and ready-made meals is much higher in urban areas than in rural areas. Rural inhabitants consume more starchy roots, pulses and nuts than their urban counterparts.” – from the FAO’s report on Ghana’s Nutritional Profile

# Nutrition Transition

## From Traditional to Modern Foods in the U.S.

### **The Jackson Heart Study: Observational Research from the United States**

A six year observational study in the Mississippi Delta, using periodic 24-hour recalls to collect data on consumption.

Results show that foods such as soft drinks, white bread, salty snacks, fried chicken, and fried fish are among the top sources of calories in this population. Data shows that in the Delta, white bread is the highest source of fiber; salty snacks are the highest source of magnesium; and cornbread is the highest source of calcium.

Study's subjects were divided into three categories:

**1. Fast Food Pattern (majority of people)**

Common foods include fast food, fruit drinks, meat, salty snacks, sugar, candy, baked desserts.

**2. Southern Pattern (second most common)**

Common foods include beans, corn, eggs, meats (especially organ meats), rice, pasta, potatoes and vegetables.

**3. Prudent Pattern (third and least common)**

Common foods included breakfast cereal, fruit, dairy, nuts, seeds.

The Jackson Heart Study team is in the process of correlating these eating patterns with health status, but preliminary data show that both the Fast Food pattern and the Southern pattern are associated with poor health outcomes (especially the Fast Food pattern.)

“It’s very clear that diet is killing people”, says JHS Researcher and African Heritage Diet Committee member Katherine Tucker, “and we need to put resources into dealing with this fact.”

*Source: Jackson Heart Study*

# Nutrition Transition

From Traditional to Modern Foods in the U.S.

Traditional Pattern	Jackson Heart Study
High in complex carbs, like whole grains, cereals and tubers	White bread
Plant-based	Low vegetable & fruit intake
Low-sodium	Fried chicken & other meats
Rich in seafood and healthy oils	High-sodium foods & snacks
Low in refined sugars	Fried fish
	Sugar & baked desserts
	Sugary drinks

# Nutrition-Transition Research Studies Across the African Diaspora

## **Obesity and Chronic Disease Rates in Botswana Hospital Workers**

In this study, a group of hospital workers underwent physical examinations to measure weight, blood pressure and cholesterol, all of which are high when a person has metabolic syndrome. The workers were divided into age and gender groups. The youngest group (ages 35-54 years) was the most affected by metabolic syndrome, whereas the elderly -- who are expected to have the greater risk of hypertension and abnormal cholesterol -- were the least affected by these diseases. One reason for this finding is that the population of Botswana is changing from its traditional lifestyle to more modern, less healthy habits, and younger people are more likely to adopt these changes. In contrast, older people, who are less inclined to change their habits, reflected a higher state of health.

[South African Medical Journal, May 2009, Vol. 99, No. 5. \(Garrido et al.\)](#)

## **Obesity in Nigeria: Current Trends and Management**

Nigeria is facing an increasing prevalence of obesity, with a particularly strong occurrence in populations with hypertension and diabetes. A Nigerian study of these increases says that the rise of obesity rates can easily be attributed to rapid unplanned urbanization, change from local dietary pattern to western style diet which is driven by the proliferation of fast food outlets in major cities across the country. This study makes that connection.

[Nigerian Medical Practitioner Vol. 54 No 1, 2008 \(11-5\). \(Akpa et al.\)](#)

## **Eating Patterns and Diet Quality Among Haitians of Montreal, Canada**

People's eating patterns are greatly influenced by where they live. This study examined the eating patterns of 181 adult Haitians living in Montreal to measure the quality of their diets, as they transitioned from traditional Haitian lifestyles to a more North American way of life. Diet quality was broken down into a categorical spectrum, spanning from "Traditional" to "Western." The researchers found that people who ate a "Traditional" diet, which was lowest in cholesterol and total fat, tended to be older and to have lived in Montreal for the shortest periods of time. The longer a person had lived in Montreal, the more "Western" their diet became, exceeding the recommended limits of total fat and cholesterol intake. Overall diet quality was significantly healthier in the "Traditional" diets than the "Western" type. The study concluded that it is important to encourage youth to retain their healthy traditional food cultures no matter where they live.

[Public Health Nutrition, May 2007. \(Désilets et al.\)](#)

## **Diets of the Urban African Population of the Cape Peninsula, South Africa**

Nurses in Cape Peninsula, South Africa, interviewed 983 adult African men and women aged 15-64 years, as part of a larger study on the high-risk nature of heart disease in this population. The interviewees met all of the dietary recommendations for carbohydrates, fats, and proteins, but their diets were low in fiber, vitamins and minerals -- indicating a nutritionally depleted diet. Comparisons with rural African populations have revealed that the dietary intake of this urbanising study population represents a transitional phase towards a progressively Western diet, which produces higher rates of heart disease.

[The Central African Journal of Medicine. 1993 Dec;39\(12\):238-47. \(Bourne et al.\)](#)

# Nutrition-Transition Research Studies Across the African Diaspora

## Nutritional Consequences of the African Diaspora

Africans carried their foods and dietary customs into diaspora throughout the Americas as a result of the European slave trade. Their descendants represent populations at different stages of a nutrition transition. West Africans are more often in the early stage, where there are many challenges and conditions like undernutrition and nutrient deficiencies. Many Caribbean populations represent the middle stages, with undernutrition and obesity co-existing. African Americans and black populations in the U.K. suffer the worst, from caloric excess and diets high in fat and animal products. Obesity, diabetes, high blood pressure, coronary heart disease, and certain cancers are prevalent in the African-American and Afro-British populations, and are beginning to emerge in populations that never before faced these diseases, as diets become more Western.

[Annual Review of Nutrition, 2001;21:47-71. \(Luke et al.\)](#)

## The Diets and Heart Health of Older South Africans

A study at the University of Cape Town's Gerontology Centre examined the diets and heart disease risk of older colored (mixed descent) South Africans. A random sample of 200 subjects aged 65 years and above in Cape Town was interviewed to obtain nutrition and life-style data, and blood samples were taken to examine markers for heart disease risk. Blood pressure was also measured according to the guidelines of the American Heart Association. Caloric intake, on average, was low, as was total fat intake. Heart disease risk was low-to-moderate, but high blood pressure was common. This population has lowered their consumption of fruit and vegetables, resulting in a low fiber intake -- very different from Africa's traditional fiber-loaded diets. The survey findings indicate a need to encourage increased physical activity levels and an increased consumption of foods including vegetables, fruit, and whole grain cereals in this population.

[East African Medical Journal. 1997 Aug;74\(8\):478-86. \(Charlton et al.\)](#)

## New Rates of High Blood Pressure in West Africa

Rates of high blood pressure are rising in West Africa. Researchers at Johns Hopkins University sampled 598 participants (aged 45+ years) in southwest Nigeria (190 rural men and women, 205 urban poor men and women, and 203 retired urban railway workmen). Overall, the average blood pressure of all of these groups was low relative to westernized societies, like the U.S or Britain, and both men and women in these groups were remarkably lean. Hypertension occurrence increased across the gradient from rural farmers (14%) to urban poor (25%) to urban railway workers (29%). Sodium levels were also highest among the urban residents. These findings demonstrate that as communities become urbanized and adopt a more Western diet, hypertension rates rise. These results also provide support for recommendations for prevention in West Africa and show that rural lifestyle and diets can provide a benchmark against which to compare populations in the African diaspora.

[American Journal of Epidemiology. 1996 Jun 15;143\(12\):1203-18. \(Kaufman et al.\)](#)





## AFRICAN HERITAGE DIET PYRAMID

*Claiming Your Health by Claiming Your History*

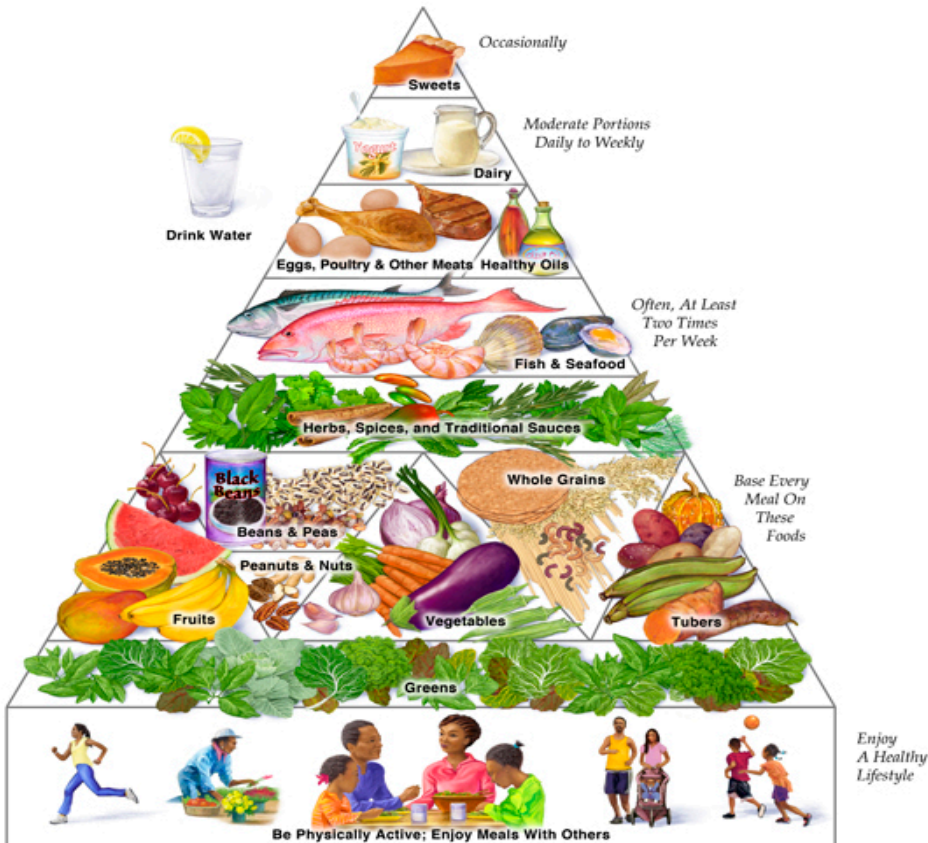


Illustration by George Middleton

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## The African Heritage Diet

The traditional eating patterns that sustained African Ancestors have the capacity to help prevent and manage the major chronic diseases that African Americans face today.

Like the Mediterranean Diet, the African Heritage Diet is as delicious as it is nutritious. This makes adherence to this diet easier and more likely than to other diets.

Embracing these traditions again, here in the U.S. and abroad, can help us win the fight against chronic, degenerative disease worldwide.



# Alzheimer's Disease

## *Major nutritional recommendations:*

1. Higher intake of antioxidants and vitamins A, E and C
2. Higher intake of omega-3s (fish at least 2x/week)
3. Maintain a healthy weight and BMI
4. Reduce intake of trans-fatty acids
5. Limit foods high in cholesterol, sodium and refined sugars
6. Research supports that the Mediterranean Diet correlates to lower risks of Alzheimer's disease and age-related cognitive impairment



## *African Heritage Diet Support:*

The African Heritage Diet is a similar overall eating pattern to the Mediterranean Diet, high in antioxidant-rich foods, as well as fruits and vegetables, especially leafy greens and tubers, that contain vitamins A and C.

Fish is recommended as primary animal protein (e.g. mackerel, sardines, tuna, salmon, trout) not only for the cardiovascular and diabetic benefits. The foods and overall diet represented in the pyramid have been shown to be useful in cholesterol- and weight-management in many studies.

Sources: The Lancet Neurology; Clinical Practice Journal; Archives of Neurology

# Asthma

## *Major nutritional recommendations:*

1. Help reduce inflammation by eating a diet like the traditional Mediterranean Diet, rich in omega 3 fatty acids and antioxidants
2. Maintain a diet high in fruits, vegetables and nuts
3. Eat to maintain a healthy weight
4. Avoid allergy-causing foods; identify trigger foods

## *African Heritage Diet Support:*

Similar to the Mediterranean Diet, the African Heritage Diet promotes anti-inflammatory foods in abundance--like fish and seafood, vegetables, fruits, beans, whole grains, nuts, and olive oil.

Source: Thorax International Journal of Respiratory Medicine, Mayo Clinic



# Bone Fractures and Osteoporosis

## *Major nutritional recommendations:*

1. Increase calcium from dark leafy greens, nuts, calcium fortified foods
2. Reduced consumption of animal protein
3. Reduced sodium intake
4. High fruit and vegetable consumption (increasing scientific interest in the alkalizing effect of fruits and vegetables on the pH of the body)
5. Moderate caffeine and alcohol intake
6. Increase vitamin D



## *African Heritage Diet Support:*

Promotes a diet high in calcium-rich foods, low in animal protein, low in sodium and total fat; encourages high intake of fruit and vegetables, and alcohol/coffee in moderation. Weight bearing outdoor activities such as walking, gardening, and playing sports encouraged for increased fitness, bone health, and vitamin D intake.

Sources: American Journal of Epidemiology; American Journal of Clinical Nutrition; Centers for Disease Control and Prevention

## Cancers (particularly colon, prostate, and stomach)

### *Major nutritional recommendations:*

1. Reduce animal fat intake; especially salted, processed, and red meats
2. Emphasize plant foods, especially fruits and vegetables
3. Increase whole grain consumption
4. Smoking cessation
5. Achieve and maintain a healthy weight throughout life; be active

### *African Heritage Diet Support:*

The African Heritage Diet Pyramid promotes a diet of overall low animal fat consumption. It promotes a diet high in vegetables and fruits, rich in African heritage whole grains, and a nutritional and lifestyle-activity plan for healthy weight loss and management.

Sources: American Cancer Society; Journal of Public Health Nutrition; Cancer Causes & Control, British Medical Journal



# Cataracts and Glaucoma

## *Major nutritional recommendations:*

1. Maintain healthy serum lipid levels, especially if diabetic
2. Eating fish 3 or more times a week correlates to less cataracts
4. Eat an anti-oxidant rich diet, full of fruits and vegetables
5. Consume more carotenoid-rich vegetables. Dark leafy greens reduce risk of cataracts (rich in lutein and zeaxanthin for eye health); Vitamins E and C (tropical fruit, peppers, sweet potatoes) may also reduce cataract risk.



## *African Heritage Diet Support:*

Rich in cholesterol- and triglyceride-lowering foods, abundant in antioxidants and carotenoid-rich vegetables, the African Heritage Diet showcases the importance of dark green leafy vegetables with its own category (to be eaten daily) and features foods rich in Vitamin A, E and C throughout (such as sweet potatoes and other tubers, oils, fruits, vegetables, and spices).

Sources: Nutrients Journal; Indian Journal of Endocrinology and Metabolism; Journal of the American Medical Association (JAMA) Ophthalmology

# Chronic Kidney Disease

## *Major nutritional recommendations:*

1. Low sodium diet
2. A diet lower in meat dietary protein and cholesterol
3. High fiber diet
4. Shifting towards more alkalinizing foods, away from acidifying foods



## *African Heritage Diet Support:*

The African Heritage Diet Pyramid is plant-based and high in daily fiber (whole grains, fruits, vegetables, legumes and tubers), and advises a more moderate intake of animal proteins. The Pyramid and our 10 Plates of Expression promote whole foods and made-from-scratch cooking as well, limiting the amount of added sodium found in many pre-packaged, processed foods.

Sources: The National Kidney Foundation; Clinical Journal of the Am. Soc. Of Nephrology, Journal of Nephrology

# Diabetes

## *Major nutritional recommendations:*

1. Blood glucose regulation through fiber-rich carbohydrate choices, in place of refined carbohydrates
2. Regular exercise and physical activity
3. Adoption of a plant-based diet that includes fish
4. Eliminate sugary drinks and processed meats
5. Get active

## *African Heritage Diet Support:*

The African Heritage Diet is a traditional dietary model, plant-based in scope, abundant in fiber-rich foods, low in refined sugars, and championing water and physical activity as an integral protocol for good health.

Sources: Nutrition, Metabolism and Cardiovascular Diseases; Public Health Nutrition; Diabetic Medicine





## Cardiovascular disease: Heart Disease, Hypertension, Stroke



### *Major nutritional recommendations:*

1. A diet higher in potassium and lower in sodium
2. Reduce cholesterol-containing foods
3. Increase carotenoid-containing fruits and vegetables
4. Increase fiber, whole grains, and cholesterol-lowering foods (oats, soy, legumes, etc.)
5. Eat fish at least 2x/week for omega-3s
6. Eat less nutrient-poor foods (added sugar and sodium; trans fats)
7. Smoking cessation; limit alcohol to 1-2 drinks/day; regular exercise

### *African Heritage Diet Support:*

The AHD Pyramid's base of healthy tubers, fruits, vegetables, beans and peas (plantains, yams, greens, avocado, papaya, pigeon peas) promotes a huge bulk of high-potassium containing food sources. The traditional diet is also especially rich in carotenoid-containing vegetables (yams, sweet potatoes, peppers, mango, palm oil). It promotes a plant-based eating plan, abundant in fiber and cholesterol-lowering foods (beans, nuts, whole grains), and an overall healthy lifestyle. AHD literature also advises alcohol in moderation, no more than 1-2 glasses/day.

## Women's Reproductive Diseases

**Endometrial Cancer** — Study linked Endometrial Cancer to obesity and Western diets high in animal protein and refined carbohydrates; rates appear to be lower in women who eat diets rich in green vegetables and fresh fruits – directly akin to the eating pattern promoted by the African Heritage Diet.

Source: European Society of Human Reproduction and Embryology, Reproductive Biology and Endocrinology: RB&E

**Uterine Fibroids:** African American women are three times more likely to develop fibroids than women of other ethnic backgrounds, with fibroids occurring at a younger age and growing more quickly with worse symptoms. Overweight and obesity also raise the risk of fibroids. It has been suggested by evidence that women who eat more than one serving per day of green leafy vegetables have a 50% reduced risk.

Sources: Journal of Reproductive Medicine, Obstetrics & Gynecology Journal



## Other Diseases

**Sickle Cell Disease** -- People with sickle cell require higher than average intakes of calories and micronutrients, especially B vitamins, as well as vitamins A, C, and E. The African Heritage Diet stresses nutrient-dense whole foods: vegetables, leafy greens, fruits, nuts, and seeds – all with high concentrations of needed vitamins and minerals.

Source: American Journal of Hematology

**Systemic Lupus Erythematosus** -- Strong geographic patterning: e.g. rare in West Africa, more common in Central and Southern African, and highest frequency in America and Europe. A diet high in antioxidants, vitamins C and E, and omega-3s is recommended to combat oxidative stress and inflammation. The AHD Pyramid stresses these nutrient-dense foods and foods proven to have anti-inflammatory properties.

Source: Systemic Lupus Erythematosus: A Companion to Rheumatology

