



Traditional Food, Culture, and Diabetes in the United States

National Center for Health in Public
Housing

April 2023

Housekeeping

- All participants muted upon entry
- Engage in chat
- Raise hand if you would like to unmute
- Meeting is being recorded
- Slides and recording link will be sent via email
- Mentimeter case study activities
 - Go to **Menti.com**
 - Enter code **3368 0881**



zoom



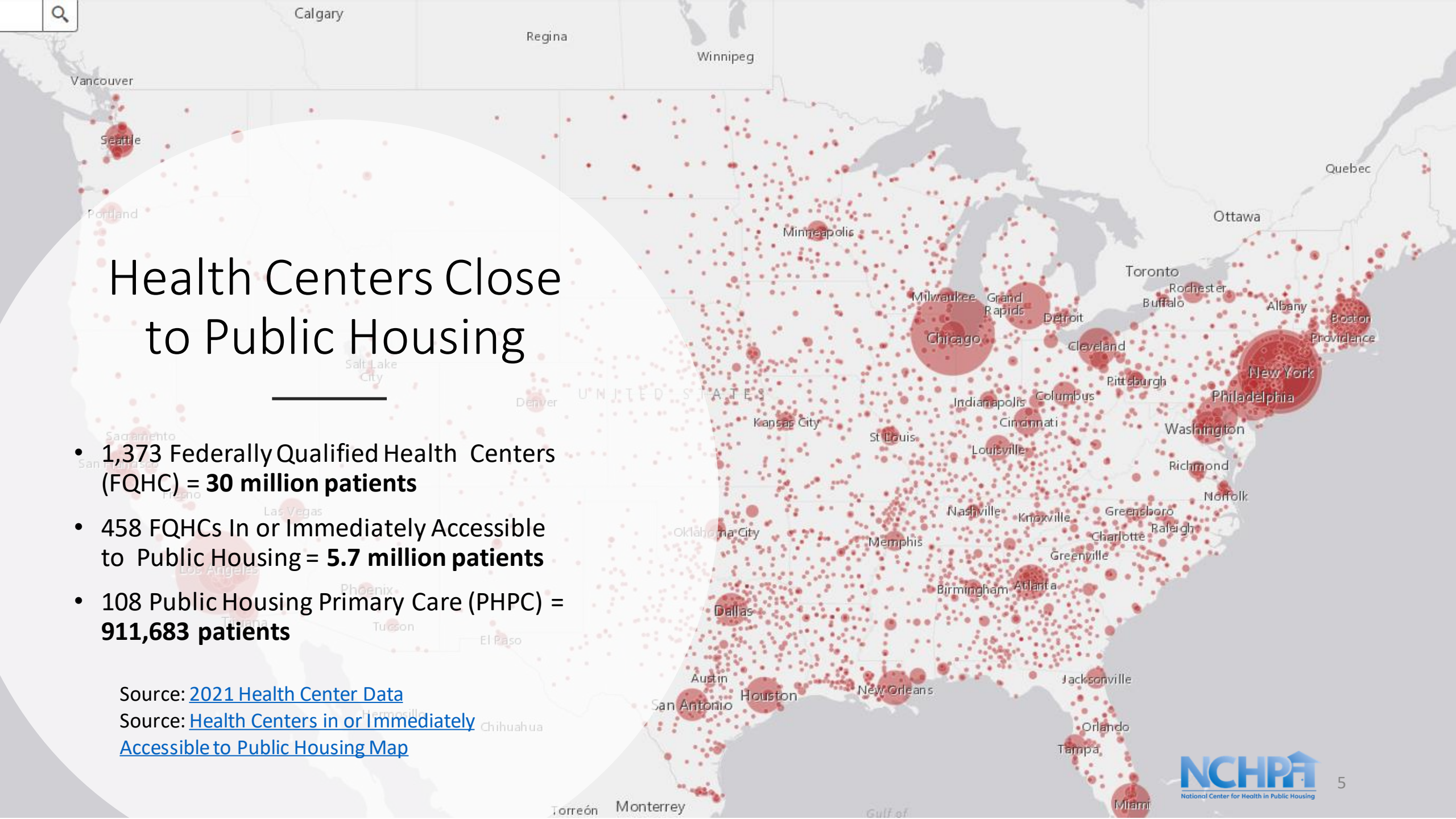
National Center for Health in Public Housing (NCHPH)

- The mission of the National Center for Health in Public Housing (NCHPH) is to strengthen the capacity of federally funded Public Housing Primary Care (PHPC) health centers and other health center grantees by providing training and a range of technical assistance.
- The National Center for Health in Public Housing (NCHPH) is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number U30CS09734, a National Training and Technical Assistance Partner (NTTAP) for \$2,006,400 and is 100% financed by this grant. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.



Learning Objectives

Discuss	The impact of diabetes in ethnic and racial minorities living in the United States
Understand	Non-adherence to medically recommended diets in racial and ethnic minorities
Examine	Nutrition Considerations for racial and ethnic minorities in the United States



Health Centers Close to Public Housing

- 1,373 Federally Qualified Health Centers (FQHC) = **30 million patients**
- 458 FQHCs In or Immediately Accessible to Public Housing = **5.7 million patients**
- 108 Public Housing Primary Care (PHPC) = **911,683 patients**

Source: [2021 Health Center Data](#)

Source: [Health Centers in or Immediately Accessible to Public Housing Map](#)

Public Housing Demographics



1.5 Million
Residents



2 Persons
Per Household



38% Disabled



52% White



91% Low
Income



43% African-
American



26% Latinx



19% Elderly



36% Children



32% Female Headed
Households with
Children

- Source: 2022 HUD Resident Characteristics Report

Diabetes Snapshot in Public Housing Primary Care (PHPCs)

Population	Total Patients	# of Patients with Diagnosis	Percentage of Patients with Diabetes
All FQHCs	30,193,278	2,873,252	10%
Public Housing Primary Care	911,683	91,563	10%
In or Immediately Accessible to Public Housing	5,714,900	1,269,671	22%

Source: [National Health Center Program Uniform Data System \(UDS\) Awardee Data 2021](#)

i Population Estimates, July 1, 2022, (V2022)

⚠ 333,287,557

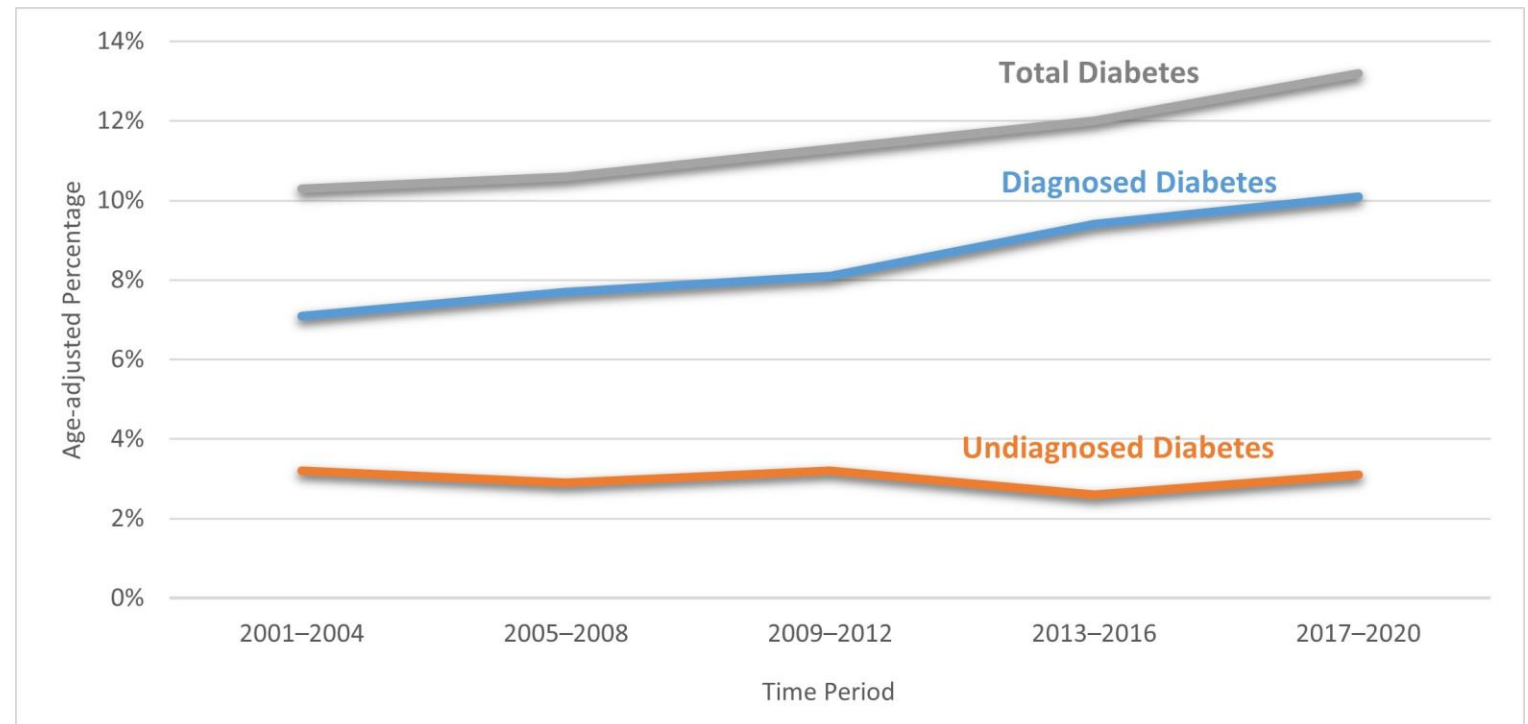
PEOPLE

Race and Hispanic Origin

i White alone, percent	⚠ 75.8%
i Black or African American alone, percent (a)	⚠ 13.6%
i American Indian and Alaska Native alone, percent (a)	⚠ 1.3%
i Asian alone, percent (a)	⚠ 6.1%
i Native Hawaiian and Other Pacific Islander alone, percent (a)	⚠ 0.3%
i Two or More Races, percent	⚠ 2.9%
i Hispanic or Latino, percent (b)	⚠ 18.9%
i White alone, not Hispanic or Latino, percent	⚠ 59.3%

Source: US Census

Trends in Prevalence of
Diagnosed Diabetes,
Undiagnosed Diabetes,
and Total Diabetes
Among Adults Aged 18
Years or Older, United
States, 2001–2004 to
2017–2020



Source: CDC.gov

T2D Risk Factors

Non-Modifiable:

Family History

Race or Ethnic Background

Age

Gestational Diabetes

Modifiable:

Weight

Physical Activity

Blood Pressure

Cholesterol Levels

Smoking

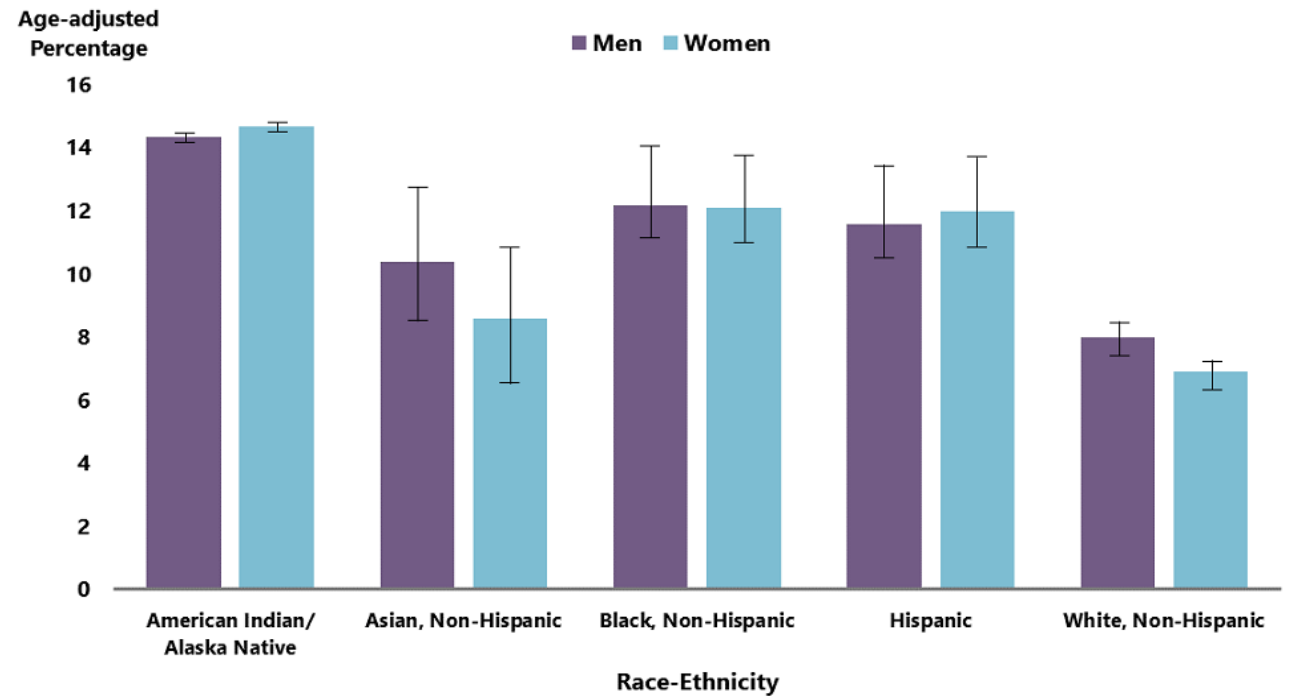
Diet

Alcohol

Stress and Well Being

Sleep

The Disparate Impact of Diabetes on Racial/Ethnic Minority Populations



Source: CDC.gov

Diabetes and African Americans

Age-adjusted percentage of adults aged 18 and over diagnosed with diabetes, 2021

Non-Hispanic Black Source: CDC.gov	Non-Hispanic White	Non-Hispanic Black/ Non-Hispanic White Ratio
12.7	7.0	1.8

Source: CDC.gov

Diabetes and Hispanic Americans

Age-adjusted percentage of adults aged 18 and over diagnosed with diabetes, 2021

Hispanic	Non-Hispanic White	Hispanic/ Non-Hispanic White Ratio
12.4	7.8	1.6

Source: CDC.gov

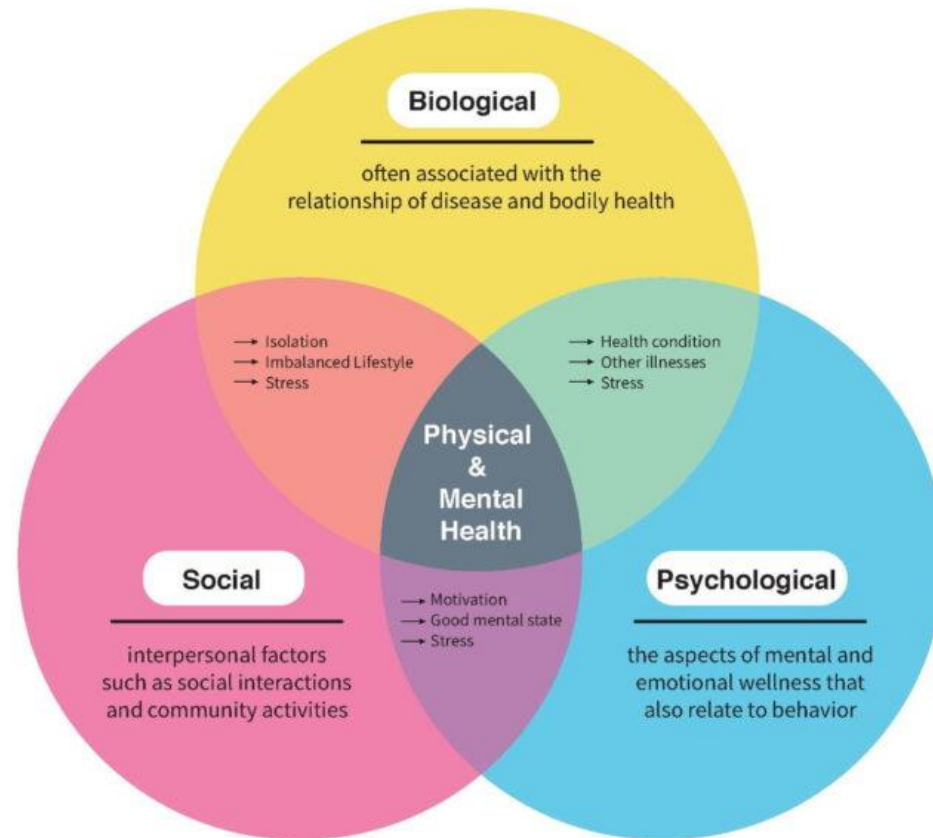
Diabetes and Asian Americans

Age-adjusted percentage of adults aged 18 and over diagnosed with diabetes, 2021

Non-Hispanic Asians	Non-Hispanic White	Non-Hispanic Asians/ Non-Hispanic White Ratio
10	7.8	1.3

Source: CDC.gov

Biopsychosocial (BPS) model



Graphic: Chrystie Tyler

Source: Washington University in St. Louis



Food Culture

Food and culture are interwoven:

Recipes and dietary practices can be used to transmit knowledge from one generation to the next.

Making and eating food solidify social bonds.

Best way to deepen your knowledge about other's culture.

Food Culture: African American

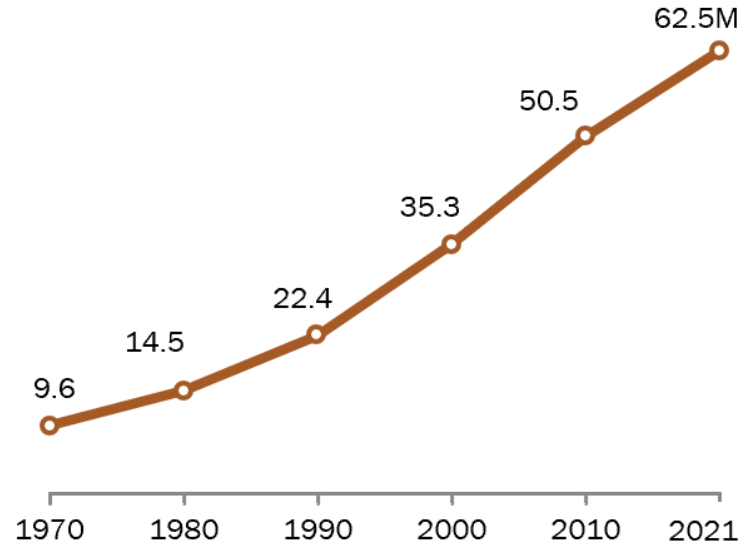
During slavery, African Americans made meals from what was available, including leftovers from their master's tables and vegetables they grew.

Meals were often prepared with high amounts of fat, sugar, and salt to meet the nutrient demands of a physically grueling lifestyle and because of limited access to healthier options.

Macaroni and cheese
Fried chicken
Red beans and rice
Corn bread
Seasoned Greens
Mashed potatoes and gravy
Iced-cold sweet tea

U.S. Hispanic population reached more than 62 million in 2021

U.S. Hispanic population, in millions



Note: Population totals are as of April 1 for 1970-2010 and July 1 for 2021. Hispanics are of any race.

Source: Pew Research Center analysis of 1970-1980 estimates based on decennial censuses (see 2008 report, “U.S. Population Projections: 2005-2050”); additional analysis of 1990-2010 PL94-171 census data and the 2021 American Community Survey (U.S. Census Bureau).

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Hispanic origin groups in the U.S., 2021

Origin group	Population	% among all U.S. Hispanics	% change 2010-2021
U.S. total	62,530,000	100%	23%
Mexican	37,235,000	59.5	13
Puerto Rican	5,800,000	9.3	24
Salvadoran	2,475,000	4.0	35
Cuban	2,400,000	3.8	28
Dominican	2,395,000	3.8	59
Guatemalan	1,770,000	2.8	53
Colombian	1,400,000	2.2	46
Honduran	1,150,000	1.8	57
Spaniard	995,000	1.6	43
Ecuadorian	815,000	1.3	25
Peruvian	720,000	1.2	20
Venezuelan	660,000	1.1	172
Nicaraguan	455,000	0.7	19
Argentinean	295,000	0.5	26
Panamanian	240,000	0.4	37
Costa Rican	190,000	0.3	44
Chilean	190,000	0.3	35
Bolivian	130,000	0.2	15
Uruguayan	65,000	0.1	9
Paraguayan	30,000	0.0	42
Other South American	40,000	0.1	62
Other Central American	30,000	0.0	1
All other Latinos	3,050,000	4.9	96

Notes: Hispanic origin is based on self-described ancestry, lineage, heritage, nationality group or country of birth. Population rounded to nearest 5,000. Listed in descending order of population size; differences between ranks may not be statistically significant. Rankings and percentages based on unrounded populations.

Source: Pew Research Center calculations based on the 2010 and 2021 American Community Surveys (U.S. Census Bureau).

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Food Culture: Hispanics

- The celebration of **Hispanic holidays, most of which are rooted in Christianity**, such as **Semana Santa ("Holy Week")**, **Las Posadas ("The Inns")**, and **Dia de los Reyes Magos ("Three Kings Day")** are often a reason to highlight traditional Hispanic foods around the world.
- The **history of Hispanic food** dates back to when the Spaniards began to learn how to cook off the land by growing rice, peppers, beans, and tomatoes in Spain. Meats and cheeses were added to the recipes providing additional sources of protein. While the recipes have been **customized by each country**, the original ingredients still shine.
- **Traditional Hispanic food is full of flavor.** The most popular Hispanic foods start with rice and vegetables and use a flavorful ingredient called sofrito. **Sofrito** is a tomato-based seasoning made with garlic, onions, bell peppers, cilantro, and other herbs. Sofritos are very uniquely individual. Many families have their own recipes that they keep a secret and pass down to younger generations

- Tacos
- Asado
- Salteñas
- Feijoada
- Pupusas
- Bandeja paisa

Food Culture: Alaska Natives

Traditional food practices

- Alaska Natives traditionally subsisted on a high-protein, high-fat, animal- and fish-based diet rather than a plant-based diet (carbohydrate foods made up only 10% of total calories).
- Staple foods were fish, fish eggs, shellfish and crustaceans, sea mammals, wild game and birds, and some edible indigenous plants such as wild greens, seaweed, roots, and berries. (Specific foods varied by region.)
- Fats consumed included whale blubber, seal and fish oils, and caribou fat.
- Before coffee and tea were introduced, water, broth, and tundra tea were beverages traditionally consumed.
- Hunting, fishing, and gathering were traditional methods of obtaining foods; food quantity and selection varied by season.
- Boiling was used as a traditional food preparation method.
- Raw, frozen meat and fish were eaten by the Inupiat Eskimos in Northern Alaska. This food practice was unique to this Alaska Native group.
- Alaska Native people used a variety of traditional healing methods, such as herbal remedies, massage, and steam baths and were accustomed to seeking the assistance of healers or shamans.

Current food practices

- Traditional foods and food practices are still common.
- Fish consumption is still high.
- Many families still gather wild berries and other local edible plants (sour dock, willow greens, wild celery, beach asparagus, and fiddlehead fern) that are eaten fresh or frozen or dried for later use.
- The use of beef, pork, and poultry and the increased use of sugary and starchy foods are two major changes from traditional food practices.
- Today's Alaska Natives rely more heavily on grocery stores for food in areas where there is a limited supply of fresh foods. Large quantities of sugar-sweetened drinks, convenience foods, and snack foods are purchased from village stores.
- Federal food programs have encouraged the use of store-bought foods.
- Commonly consumed carbohydrate foods include sugar, white bread, rice, pilot bread (unsalted, dense round crackers), sourdough pancakes, and cooked cereals.
- Fruits and vegetables are eaten infrequently. Potatoes, lettuce, onions, and carrots are among the vegetables that are consumed most often. Canned fruits, juices, and vegetables are used more frequently than fresh produce.
- Major types of fat used today include the traditional fats listed above, as well as butter, margarine, lard, shortening, and vegetable oils.
- Imported foods are transported to village stores by plane or barge and are expensive.
- Milk is consumed infrequently. Fresh milk is expensive, and lactose intolerance is common. Tea, coffee, and sugar-sweetened drinks are now the most commonly consumed beverages.
- Alaska Natives do not commonly follow a three-meal-a-day eating pattern, although breakfast and evening meals tend to be consistent. Mid-afternoon and evening snacking is common.



ROSA FUENTES

Age: 69

Occupation: Retired

Family: Widow, mother of three adult children and seven grandchildren

- She was recently diagnosed with prediabetes at her annual wellness check-up; no other health issues were detected.
- Her fasting glucose level was 110.
- Her weight is within the healthy BMI range for her height.

Case study:



Rosa's typical diet

› Breakfast

- Oatmeal with honey and raisins
- Whole wheat bread with peanut butter
- Freshly squeezed orange and carrot juice

› Lunch

- Mexican rice (fried with tomato sauce)
- Beans (pinto, canary, black)
- Tacos (chicken, steak, lengua [beef tongue], or pork [al pastor or carnitas style]) with cilantro and onion

› Dinner

- Caldos (stews/soups that contain chicken, beef, oxtail, fish, carrots, green beans, potatoes, onions), calabazitas (squash) and rice
- Nopales (cactus) with tomatoes, cilantro and onions, eaten with tostadas

› Favorite Drinks

- Horchata (rice, condensed milk, cinnamon)
- Aguas frescas (puréed fruit, water, sugar); flavors may include limón (lime), jamaica (hibiscus) and tamarindo (tamarind)

› Dessert

- Flan and gelatina (gelatin)

Case Study



HECTOR DE LEÓN

Age: Mid-50s

Occupation: Engineer

Family: Father to four school-aged children

- He was diagnosed with type 2 diabetes a couple of years ago and keeps failing at maintaining long-term, healthy lifestyle habits due to stress and low back pain from sitting at an office job.
- His A1C was 8.2 one year ago.



Hector's Typical Diet

› BREAKFAST

- Scrambled eggs, peppers, mushroom, chorizo (Spanish or Mexican pork sausage)
- Fruit, such as papaya, mango, banana, berries
- Piece of toast
- Cremas with cinnamon and fruit
- Café con leche

› LUNCH

- Leftovers from dinner the night before
- Fast food, or will skip lunch

› DINNER

- Sofrito (peppers, onion, garlic and tomatoes cooked in olive oil) with fried chicken, fried fish or pork salad
- Cuchifritos (fried fish, beef, pork or chicken)
- Tostones (twice-fried plantains)
- Mofongo (plantains that are fried and mashed, usually containing chicharrones (pork belly and/or rinds))

› SNACKS

- Fresh fruit
- Plantain chips

› DRINKS

- Soda
- Fruit juice
- Beer
- Rum

Case Study



ELIZABETH RIOS

Age: Mid-40s

Occupation: Office worker

Family: Mother to school-aged children

- She has difficulty balancing work and home life.
- She was diagnosed with diabetes a couple of years ago and hasn't had time to see the doctor for regular check-ups.
- Her A1C was out of the desired range when she was diagnosed; however, she has not rechecked it since.

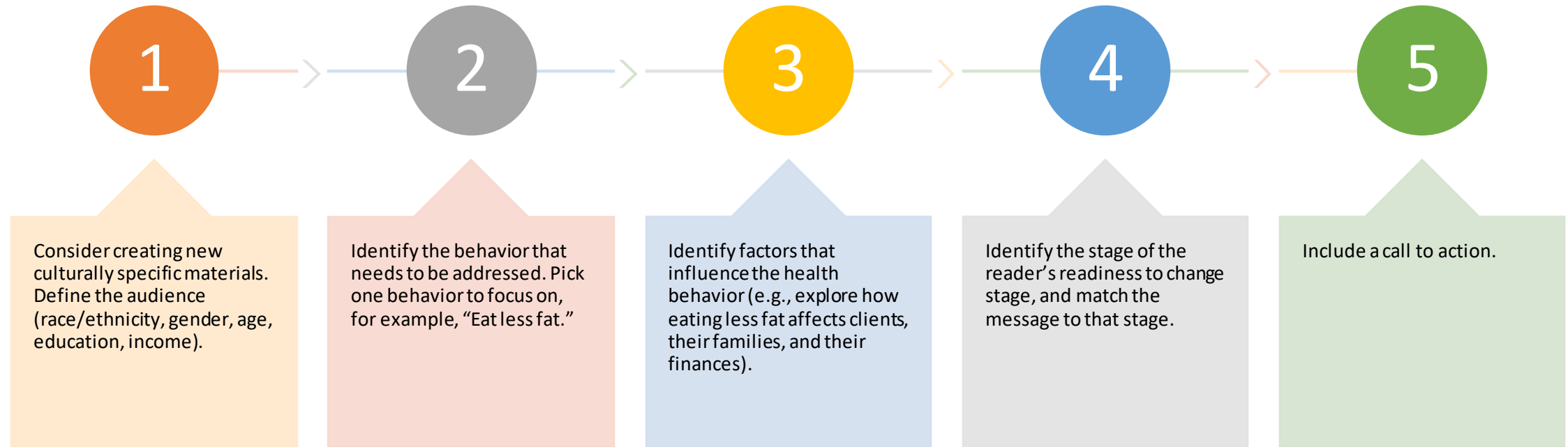
Communication and Intervention in Multicultural Nutrition Counseling

- Establish respect and trust. Maintain client dignity. Keep a nonjudgmental attitude and accept cultural differences.
- To increase credibility, have knowledge of clients' food habits and health beliefs.
- Be sensitive to verbal and nonverbal communications (e.g., know what is the appropriate degree of eye contact in a given culture).
- Determine primary language, written and verbal, used in clients' homes.
- When necessary, use trained interpreters who understand medical terminology and the concepts being taught.
- Determine clients' preferred communication style: Does a given client prefer direct or indirect communication? Indirect communication may mean presenting information in the third person (e.g., "Someone who has been asked to eat less fat, might do this . . .") or explaining the necessary nutrition concepts through the use of stories.

Communication and Intervention in Multicultural Nutrition Counseling

- Provide information that is most pertinent to clients (i.e., what they need to know, rather than what is nice to know).
- Focus on positive messages, such as prevention of complications, well-being, and balance.
- Be consistent in the messages you communicate.
- Work in partnership with community leaders and social institutions within the community.
- Train and collaborate with community health workers who can play an essential role as a cultural link to the ethnic community.
- Disseminate information through established channels (cultural leaders, ethnic radio and television stations, ethnic newspapers).

Adaptation of diabetes education approaches and materials



**Meal**

Breakfast, typical

Content

1/2 cup grits, 2 fried eggs, 2 sausage patties, 2 buttermilk biscuits, coffee with sugar, 1 Tbsp. margarine

Breakfast, modified

1/4 cup egg substitute, 1 homemade sausage, 2 slices whole wheat toast, 1 cup cubed cantaloupe, coffee with sugar substitute, 1 tsp. margarine

Lunch, typical

1 fried chicken leg quarter, 1/2 cup mashed potatoes, 1/2 cup green beans seasoned with ham, 1 medium tomato, 1 hot roll, 1 Tbsp. margarine, 1/2 cup blackberry cobbler, iced tea with lemon and sugar

Lunch, modified

1 skinless baked chicken quarter, green beans seasoned with fat-free low-sodium broth, 1 tsp. margarine, 1 1/4 cup strawberries with sugar substitute, iced tea with lemon and sugar substitute

Sample Dietary Modification for an African-American Patient With Diabetes



Meal	Content
Breakfast, typical	3/4 cup refried beans with chorizo (Mexican sausage), 2–3 corn tortillas, 8 oz. coffee with 3 oz. milk
Breakfast, modified	1/3 cup boiled beans with chili sauce, 2 corn tortillas, 8 oz. coffee with 3 oz. low-fat milk, 1 small banana
Lunch, typical	2 cups chicken soup with assorted vegetables and 3 oz. chicken, 2–4 tortillas, 1 cup Mexican rice or pasta fried in 1 Tbsp. of oil, 8 oz. sweetened carbonated or uncarbonated drink
Lunch, modified	2 cups chicken soup with 2 oz. of chicken, 2 corn tortillas, 1/3 cup Mexican rice or pasta fried in 1/2 tsp. oil; 8 oz. of diet soda or other noncaloric beverage or water

Sample Dietary Modification for a Mexican-American Patient With Diabetes

Fruits and Vegetables

Instead of this:

Try this:

Regular or fried vegetables served with cream, cheese, or butter

Raw, steamed, boiled, sautéed, or baked vegetables tossed with olive oil, salt, and pepper, or with onions, garlic, or spices (like cumin)

Fruits served with cream cheese or sugary sauces

Fresh fruit with peanut, almond, or cashew butter or plain yogurt

Fried potatoes, including french fries, hash browns, and potato chips

Baked sweet potatoes or switch with vegetables instead

Grains

Instead of this:

Try this:

Croissants, rolls, biscuits, and white bread

Whole grain breads, including wheat, rye, and pumpernickel

Doughnuts, pastries, and scones

Whole grain English muffins and small whole grain bagels

Fried tortillas

Soft tortillas (corn or whole wheat) that do not contain trans fats

Sugary cereals and regular granola

Whole grain cereal, oatmeal, and reduced-sugar granola

Snack crackers

Whole grain crackers

Potato or corn chips and buttered popcorn

Unbuttered popcorn

White pasta

Whole wheat pasta

White rice

Brown or wild rice

Fried rice or pasta mixes

Brown rice or whole grain pasta with low-sodium vegetable sauce

All-purpose white flour

Whole wheat flour

Protein

Instead of this:

Try this:

Prime and marbled cuts of meat

Select-grade lean beef, such as round, sirloin, and loin cuts

Pork spare ribs and bacon

Lean pork, such as tenderloin and loin chop, turkey bacon, or tofu bacon

Regular ground beef

Lean or extra-lean ground beef, ground chicken or turkey, tempeh, or beans

Lunch meats like pepperoni, salami, bologna, and liverwurst

Lean lunch meats like turkey, chicken, and ham

Regular hot dogs and sausage

Fat-free hot dogs, turkey dogs, or tofu hot dogs

Breaded fish sticks and cakes, fish canned in oil, or seafood prepared with butter or served with high-fat sauce

Fish (fresh, frozen, or canned in water), grilled fish sticks and cakes, or shellfish

Dairy

Instead of this:

Try this:

Whole milk

Skim (nonfat), 1% or 2% (low fat), or nondairy milk, such as oat, soy, rice, almond, or cashew milk

Cream or evaporated milk

Evaporated skim milk

Regular buttermilk

Low-fat buttermilk

Yogurt made with whole milk

Low-fat or nonfat yogurt

Regular cheese, including American, blue, Brie, cheddar, Colby, and Parmesan

Low-fat cheese with less than 3 g of fat per serving, or nondairy soy cheese

Regular cottage cheese

Low-fat cottage cheese (less than 2% fat)

Regular cream cheese

Low-fat cream cheese with less than 3 g of fat per 1-oz serving, or skim ricotta

Ice cream

Sorbet, sherbet, or frozen yogurt with less than 3 g of fat per ½-cup serving

Fats and Oils

Instead of this:

Try this:

Cookies

Fruit or whole grain cookies (such as cookies made with oatmeal or whole-wheat flour rather than with refined, bleached white flour)

Shortening, butter, and margarine

Olive, canola, and soybean oils

Regular mayonnaise

Yogurt

Regular salad dressing

Vinaigrette made with olive oil and vinegar

Butter or fat to grease pans

Nonstick cooking spray, olive oil, or canola oil

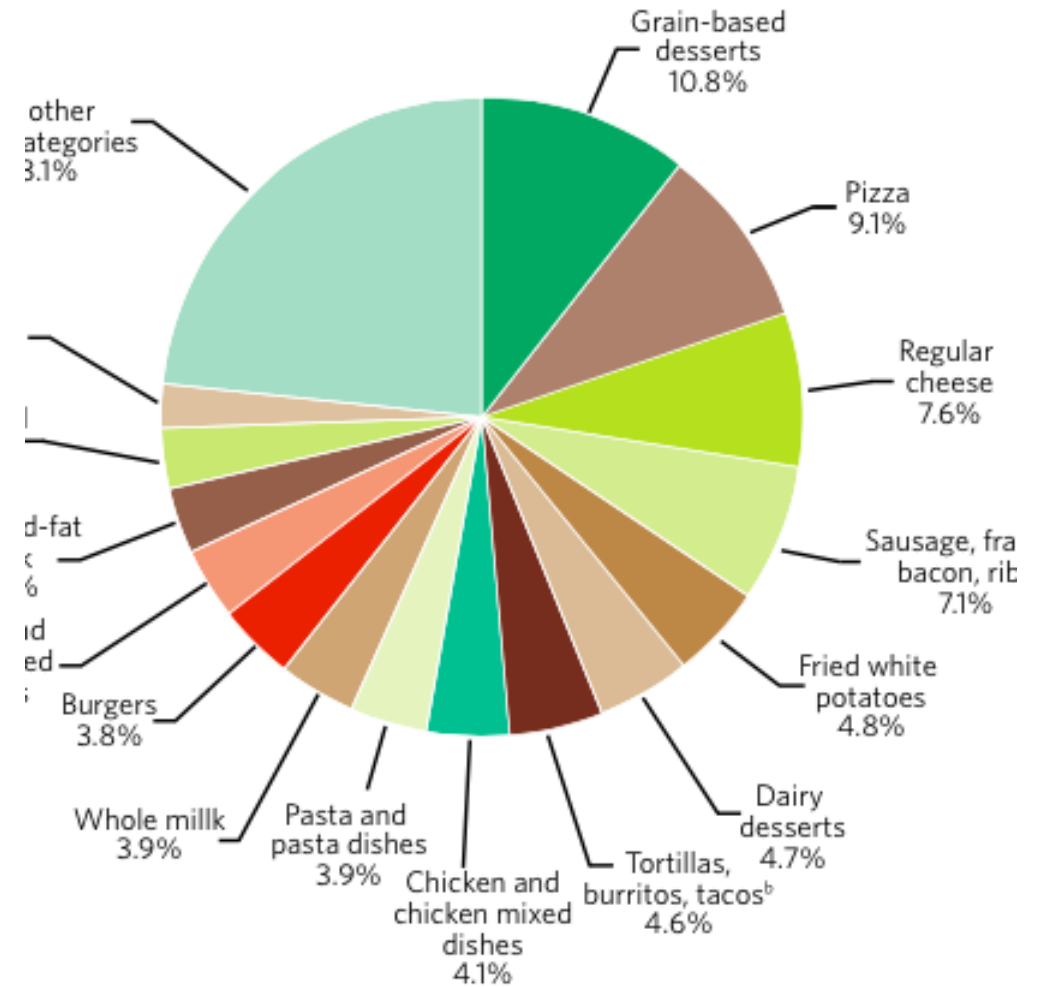
Implications for Nutrition Counseling



Health professionals should encourage the consumption of traditional foods because of the rich nutrient content they offer and their strong association with cultural customs.



English is commonly a second language and there is a need for trained translators.



Acculturation

Biology

Clinicians' cultural awareness

Depression and Emotional Distress

Educational level

Fears

Group Engagement

Health Literacy

Intimacy/Sexual Dysfunction

Judging

Knowledge of the Disease

Language

Medication Adherence

Nutrition

Other Forms of Medicine

Perception of Body Image

Quality of Life

Religion and Faith

Socio-economic status

Technology

Unconscious Bias

Vulnerable Groups

Why?

Xercise!

You are in charge

Zip it!

Q&A Session





Complete our Post Evaluation Survey



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Thank you!

