



CARDI•OH

Ohio Cardiovascular and Diabetes Health Collaborative



In partnership with:



Cardi-OH ECHO

Health Equity and Cardiovascular Risk

September 21, 2023



Cardi-OH ECHO Team

FACILITATOR

Goutham Rao, MD, FAHA
Case Western Reserve University

CONTENT EXPERTS

Karen Bailey, MS, RDN, LD, CDCES
Ohio University

Kristen Berg, PhD
Case Western Reserve University

Elizabeth Beverly, PhD
Ohio University

Danette Conklin, PhD
Case Western Reserve University

Kathleen Dungan, MD, MPH
The Ohio State University

Adam Perzynski, PhD
Case Western Reserve University

Marilee Clemons, PharmD
University of Toledo

Chris Taylor, PhD
The Ohio State University

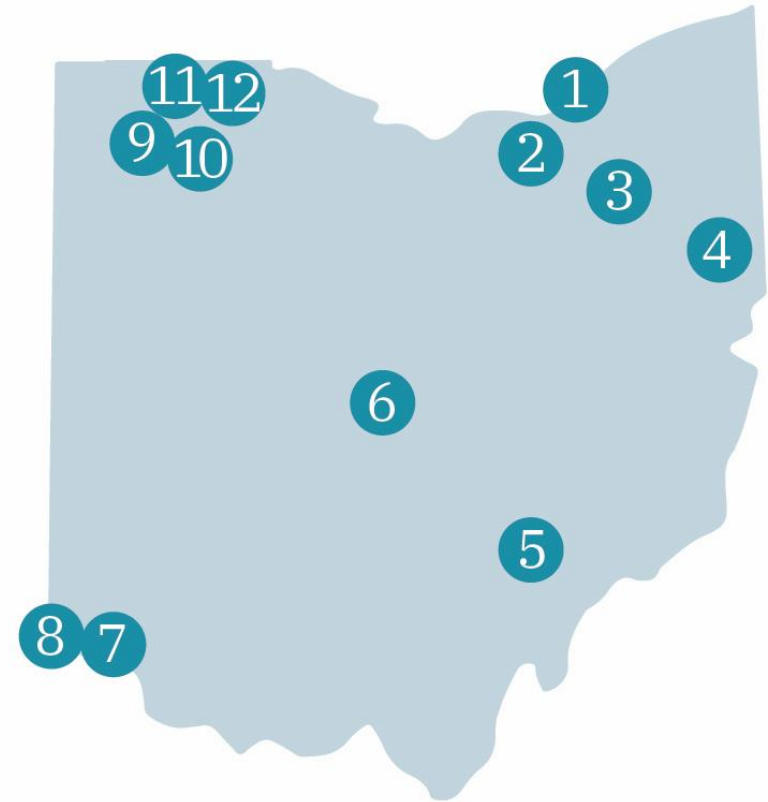
Kelsey Ufholz, PhD
Case Western Reserve University

James Werner, PhD, MSSA
Case Western Reserve University

Jackson Wright, MD, PhD
Case Western Reserve University



Fall 2023 Cardi-OH ECHO Participant Sites



- | | | |
|-----------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------------------------|
| 1 University Hospitals Cinema/ Achieve GreatER Cleveland | 5 Ohio University Diabetes Institute Athens | 9 UTMC Comprehensive Care Center, Internal Medicine Toledo |
| 2 MetroHealth Bedford Medical Offices Bedford | 6 Southeast Healthcare Inc Columbus | 10 UTMC Practice Toledo |
| 3 Summa Family Medicine Akron | 7 UC Health Cincinnati | 11 UTMC Family Medicine Toledo |
| 4 SRMC Internal Medicine Center Salem | 8 Crossroad Health Center Cincinnati | 12 Paramount Health Care Inc Toledo |

Disclosure Statements



- The following speakers and subject matter experts have a relevant financial interest or affiliation with one or more organizations that could be perceived as a real or apparent conflict of interest in the context of the subject of their presentation*:
 - Danette Conklin, PhD; Kathleen Dungan, MD, MPH; Adam T. Perzynski, PhD; Christopher A. Taylor, PhD, RDN, LD, FAND; Jackson Wright, MD, PhD
- The remaining speakers and subject matter experts have no financial relationships with any commercial interest related to the content of this activity:
 - Karen Bailey, MS, RDN, LD, CDCES; Kristen Berg, PhD; Elizabeth Beverly, PhD; Merilee Clemons, PharmD; Revital Gordodeski Baskin, MD; George Matar, MD; Kelsey Ufholz, PhD; Goutham Rao, MD; James Werner, PhD, MSSA
- The following members of the planning committee DO NOT have any disclosures/financial relationships from any ineligible companies:
 - Shari Bolen, MD; Anderson Christopher; Richard Cornachione; Carolyn Henceroth; Gillian Irwin; Michael Konstan, MD; Elizabeth Littman; Devin O'Neill; Steven Ostrolencki; Ann Nevar; Claire Rollins; Catherine Sullivan

* These financial relationships are outside the presented work.

** For more information about exemptions or details, see www.acme.org/standards

Today's Presenters

FACILITATOR

Goutham Rao, MD, FAHA
Case Western Reserve University

DIDACTIC PRESENTER

Chris Taylor, PhD
The Ohio State University

LEAD DISCUSSANTS

Kathleen Dungan, MD, MPH
The Ohio State University

Chris Taylor, PhD
The Ohio State University

CASE PRESENTER

L. Austin Fredrickson, MD
SRMC Internal Medicine Center





Dietary Preferences and their Role in Driving Cardiovascular Risk

Chris Taylor, PhD, RD, LD

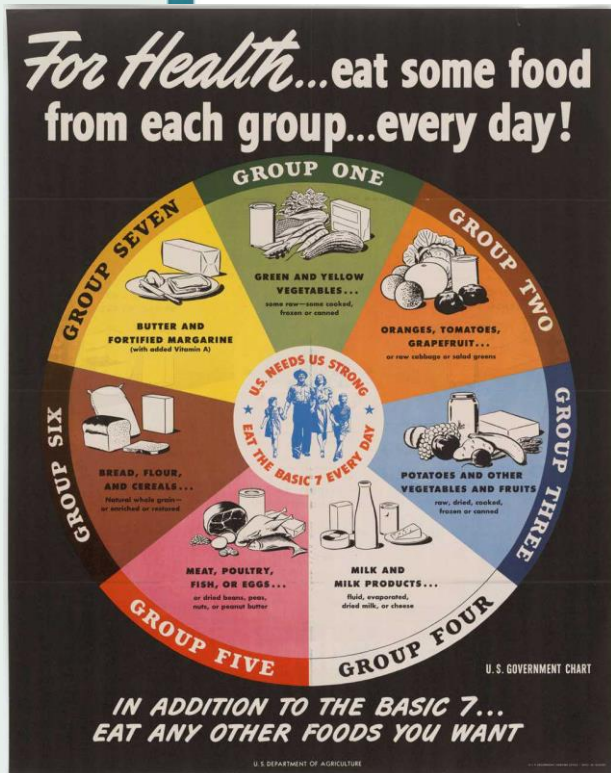
Professor and Director of Medical Dietetics
Professor of Family Medicine and Community Health
School of Health and Rehabilitation Sciences
College of Medicine
The Ohio State University

Learning Objectives

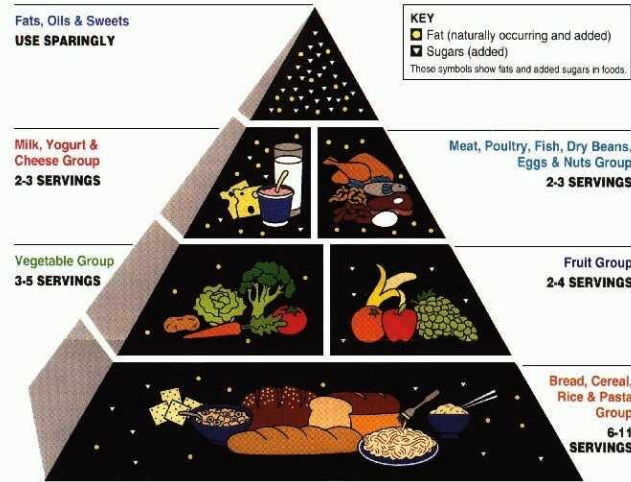


- 1) List sources of data on dietary preferences of different subpopulations in the United States.
- 2) List and describe a minimum of three significant racial and ethnic disparities in healthy eating.
- 3) Describe a culturally sensitive approach to identifying dietary behaviors contributing to cardiovascular risk.

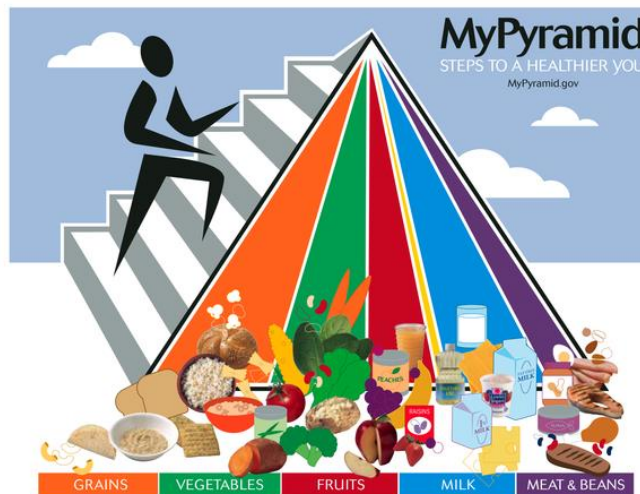
Creating a Foundation for Nutrition Guidance



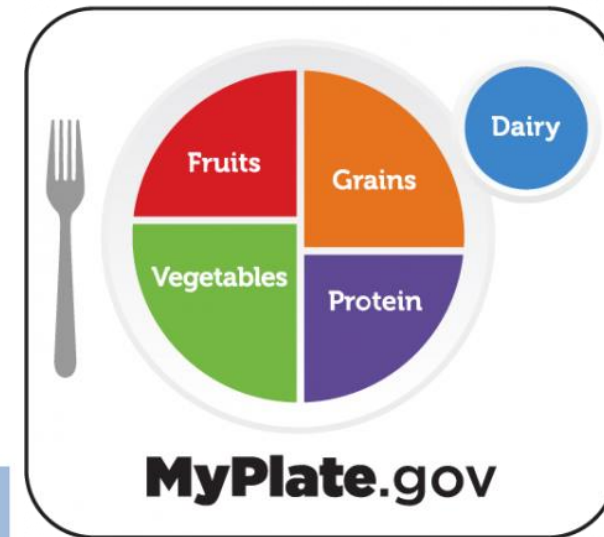
Basic 7
1943



Food Guide
Pyramid
1992



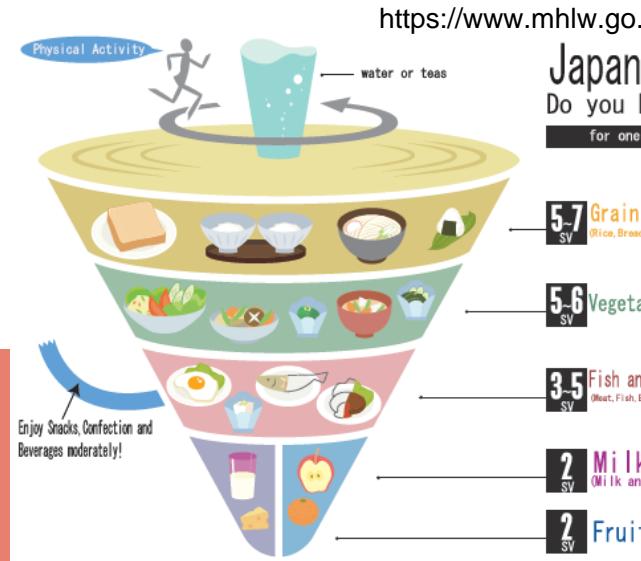
MyPyramid
2005



MyPlate
2011

Translation

EAT A VARIETY OF FOODS INCLUDING RICE & OTHER GRAINS, VEGETABLES, FRUITS, MILK & DAIRY PRODUCTS, MEAT, FISH, EGGS, AND BEANS



<https://www.mhlw.go.jp/bunya/kenkou/pdf/eiyou-syokujij5.pdf>

Japanese Food Guide Spinning Top

Do you have a well-balanced diet?

| for one day | Example of dishes or food |
|-------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| 5-7 SV Grain dishes (Rice, Bread, Noodles, and Pasta) | 1sv = [rice] = [bread] = [noodles] = [pasta] 1.5sv = [rice] 2sv = [bread] = [noodles] = [pasta] |
| 5-6 SV Vegetable dishes | 1sv = [vegetables] = [vegetables] = [vegetables] = [vegetables] = [vegetables] 2sv = [vegetables] = [vegetables] = [vegetables] |
| 3-5 SV Fish and Meat dishes (Meat, Fish, Egg and Soy-bean dishes) | 1sv = [fish] = [meat] = [egg] = [soy-bean] 2sv = [fish] = [meat] = [egg] = [soy-bean] 3sv = [fish] = [meat] = [egg] = [soy-bean] |
| 2 SV Milk (Milk and Milk products) | 1sv = [milk] = [cheese] = [yogurt] 2sv = [milk] = [cheese] = [yogurt] |
| 2 SV Fruits | 1sv = [fruit] = [fruit] = [fruit] = [fruit] = [fruit] |

※ SV is an abbreviation of "Serving", which is a simply countable number describing the approximated amount of each dish or food served to one person
Decided by Ministry of Health, Labour and Welfare and Ministry of Agriculture, Forestry and Fisheries.



Eat a variety of foods daily in the recommended amounts for a well-balanced diet.



- Grains 2-4 servings/day
- Meat, Fish, Eggs & Beans 3-4 servings/day
- Vegetables more than 2 servings/meal
- Fruits 1-2 servings/day
- Milk 1-2 servings/day

Source: Ministry of Health and Welfare, Welfare · The Korean Nutrition Society, Dietary Reference Intakes for Koreans 2015, 2015.

<https://onav.fr/wp-content/uploads/2021/01/General-Dietary-Guidelines-for-Koreans.pdf>



<https://www.nin.res.in/downloads/DietaryGuidelinesforNINwebsite.pdf>

MORE FRUIT AND VEGETABLES
ITALIAN DIETARY GUIDELINES

BE A GOOD EXAMPLE FOR CHILDREN

EAT FRUIT AND VEGETABLES AS SNACK

VARY THE COLOURS OF FRUIT AND VEGETABLES IN YOUR DIET

USE FRUIT AND VEGETABLES AS INGREDIENTS IN THE RECIPES

GET SMALL QUANTITIES OF NUTS*
*WITHOUT SALT AND SUGAR

GET FRUIT AND VEGETABLES AVAILABLE FOR ELDERLY

DO NOT OVERCOOK THE VEGETABLES

CONSUME MORE SERVINGS OF FRUIT AND VEGETABLES DAILY GIVE PREFERENCE TO SEASONAL PRODUCTS AND DO NOT ADD TOO MANY SEASONING

crea Italian Dietary Guidelines:
<https://www.crea.gov.it/web/alimenti-e-nutrizione/-/linee-guida-per-una-sana-alimentazione-2018>

FIGURE 4 | The decalogue for promotion of fruit and vegetable consumption.

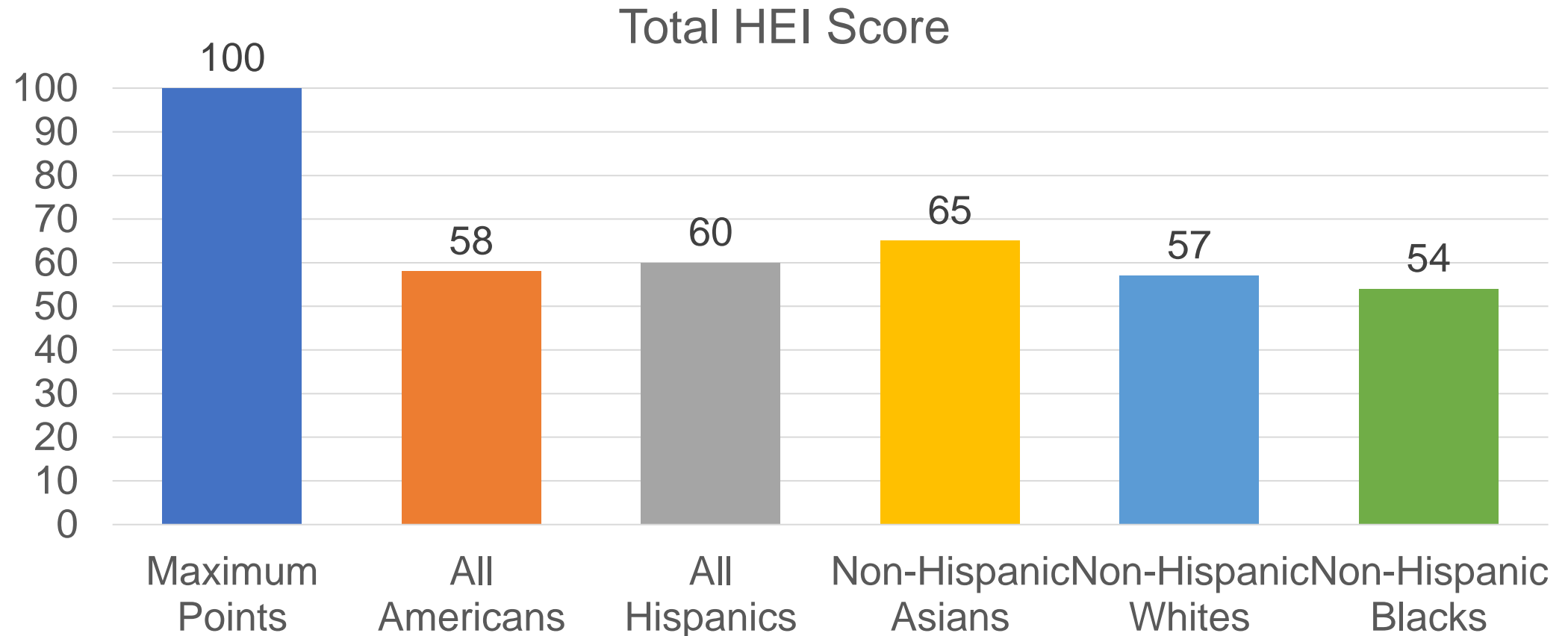
<https://doi.org/10.3389/fnut.2022.861526>

Adaptations to Various Cultures



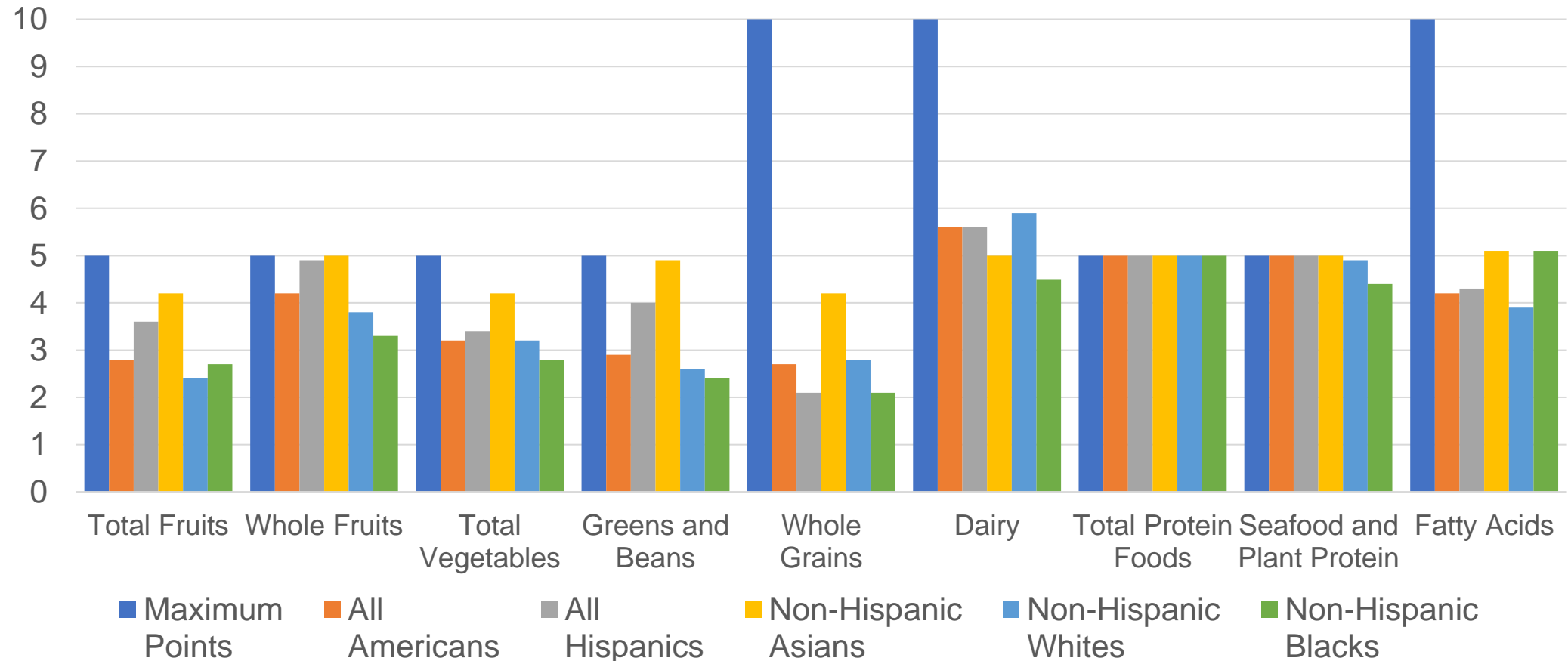
- International food guidance represents a variation on a theme
- Cultural foodways often reflect specific food and beverage selections within food groups
 - Staple carbohydrates
 - Vegetables
 - Fruits
 - Protein sources
 - Nuts, seed, legumes, beans, peas, and lentils
 - [Muslim Dietary Considerations/Halal](#)

Differences in Diet Quality by Race and Ethnicity – Overall Quality



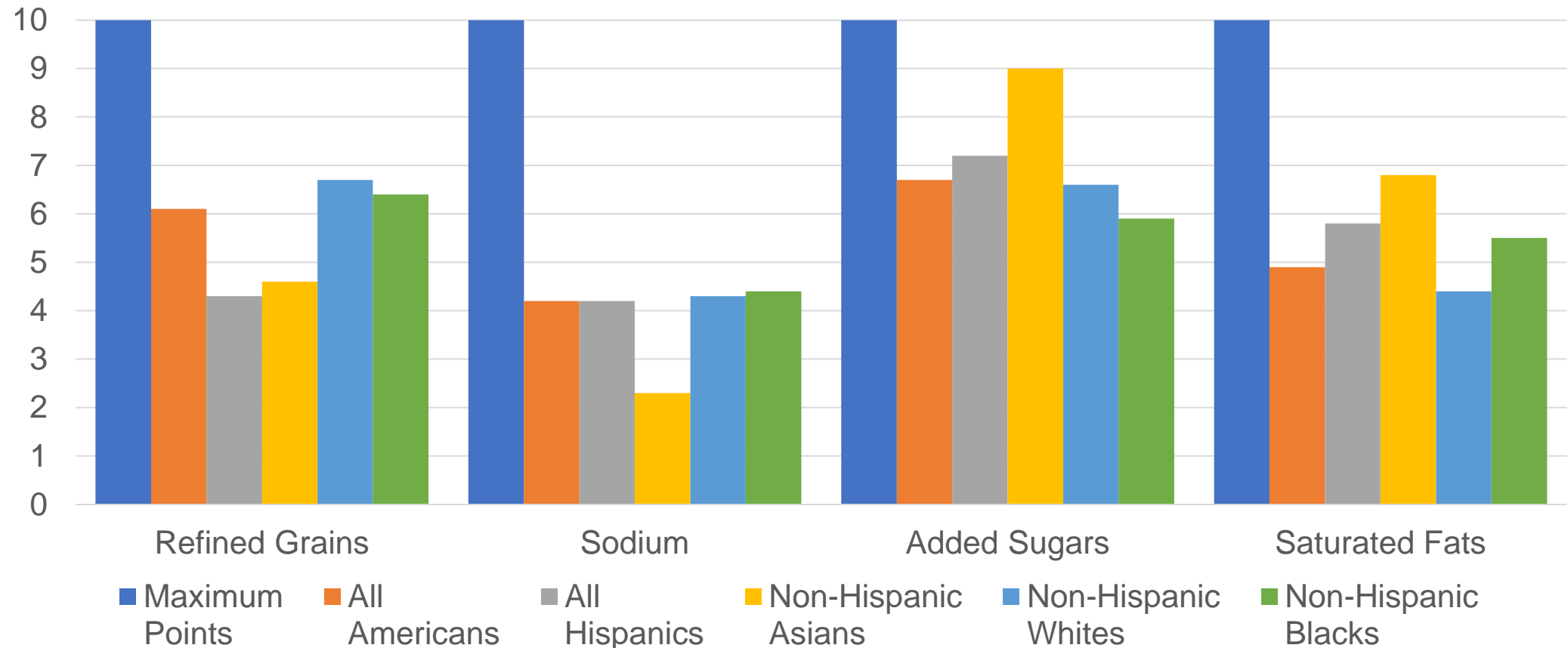
<https://www.fns.usda.gov/cnpp/hei-scores-americans>

Differences in Diet Quality by Race and Ethnicity - Adequacy



<https://www.fns.usda.gov/cnpp/hei-scores-americans>

Differences in Diet Quality by Race and Ethnicity - Moderation



<https://www.fns.usda.gov/cnpp/hei-scores-americans>

Planning for Dietary Restrictions

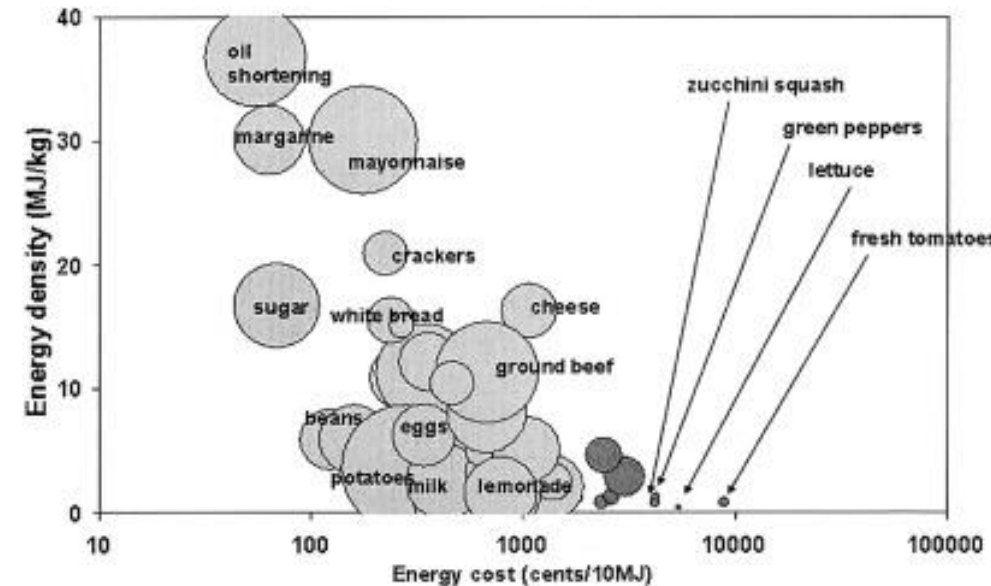


- Modifications to eating patterns for numerous reasons
 - Cultural, religious, ethical, regional
- Family and personal roles related to food, meals, preparation, and participation
- Cultural traditions, holidays, frequency, duration, and considerations
- [FAO](#) Food Based-Dietary Guidelines

Addressing Health Disparities



- Race and Ethnicity tied to many health disparities
 - Inequities tied to socioeconomic position, access, affordability
- Representation, Equity, or Access
 - “Choice?”
- Honor representation of self
 - Inform choices and opportunities
- Referrals



Additional Resources



- USDA has created numerous resources to support culturally-tailored dietary guidance
 - <https://www.nutrition.gov/topics/shopping-cooking-and-meal-planning/culture-and-food>
- Cultural Awareness of Eating Patterns in the Health Care Setting
 - <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7727853/>
- US Dietary Guidelines
 - <https://www.dietaryguidelines.gov/>
- MyPlate online resources
 - <https://www.myplate.gov/>

Questions

Chris Taylor, PhD, RDN, LD, FAND
Chris.Taylor@osumc.edu



Thank you!

Questions/Discussion