



CARDI•OH

Ohio Cardiovascular and Diabetes Health Collaborative



In partnership with:



Cardi-OH ECHO

Your Patient with Diabetes at Risk for Heart Disease: A Series of Case Discussions

October 7, 2021

Cardi-OH ECHO Team and Presenters



FACILITATOR

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CASE PRESENTERS

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Fall 2021 Cardi-OH ECHO Participant Sites



- 1 MetroHealth Bedford Internal Medicine**
Bedford, OH
- 2 MetroHealth Broadway Family Medicine Clinic**
Cleveland, OH
- 3 University Hospitals MacDonald Women's Hospital**
Cleveland, OH

- 4 SRMC Internal Medicine Center**
Salem, OH
- 5 Heart of Ohio Family Health**
Whitehall, OH
- 6 Crossroad Health Center**
Harrison, OH
- 7 Crossroad Health Center**
Cincinnati, OH

- 8 Five Rivers Family Health Center**
Dayton, OH
- 9 University of Toledo General Internal Medicine**
Toledo, OH
- 10 University of Toledo Comprehensive Clinics**
Toledo, OH

Structure of ECHO Clinics

Duration	Item
5 minutes	Introductions and announcements
10 minutes	Didactic presentation, followed by Q&A
40 minutes (20 minutes per case)	Patient case study presentations and discussions
5 minutes	Reminders and Post-Clinic Survey

Disclosure Statements



- The following planners, speakers, and/or content experts of the CME activity have financial relationships with commercial interests to disclose:
 - Marilee Clemons reports receiving consulting fees from Novo Nordisk.
 - Kathleen Dungan, MD, MPH reports receiving consulting fees from Eli Lilly, Novo Nordisk and Boehringer, research support from Sanofi, , ViacYTE, and Abbott and presentation honoraria from UpToDate, Elsevier, ACHL, and CMHC.
 - Adam T. Perzynski, PhD reports being co-owner of Global Health Metrics LLC, a Cleveland-based software company and royalty agreements for book authorship with Springer Nature publishing and Taylor Francis publishing.
 - Christopher A. Taylor, PhD, RDN, LD, FAND reports grant funding for his role as a researcher and presenter for Abbott Nutrition and grant funding for research studies with both the National Cattleman's Beef Association and the American Dairy Association Mideast.
 - Jackson T. Wright, Jr., MD, PhD reports receiving fees for serving as an advisor to Medtronic.
 - These financial relationships are outside the presented work.
- All other planners, speakers, and/or content experts of the CME activity have no financial relationships with commercial interests to disclose.

Person-Centered Language Recommendations



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The ADA and the APA recommend language that emphasizes inclusivity and respect:

- **Gender**: Gender is a social construct and social identity; use term “gender” when referring to people as a social group. Sex refers to biological sex assignment; use term “sex” when referring to the biological distinction.
- **Race**: Race is a social construct that is broadly used to categorize people based on physical characteristics, behavioral patterns, and geographic location. Race is not a proxy for biology or genetics. Examining health access, quality, and outcome data by race and ethnicity allows the healthcare system to assist in addressing the factors contributing to inequity and ensure that the health system serves the needs of all individuals.
- **Sexual Orientation**: Use the term “sexual orientation” rather than “sexual preference” or “sexual identity.” People choose partners regardless of their sexual orientation; however, sexual orientation is not a choice.
- **Disability**: The nature of a disability should be indicated when it is relevant. Disability language should maintain the integrity of the individual. Language should convey the expressed preference of the person with the disability.
- **Socioeconomic Status**: When reporting SES, provide detailed information about a person’s income, education, and occupation/employment. Avoid using pejorative and generalizing terms, such as “the homeless” or “inner-city.”

Lifestyle Approaches to Diabetes and Associated Cardiovascular Risks



Christopher Taylor, PhD, RD, LD

Professor and Director of Medical Dietetics

Director, Coordinated Program in Dietetics

Co-Director, Master of Dietetics and Nutrition Future Education Model Graduate Program

Professor of Family Medicine

The Ohio State University College of Medicine

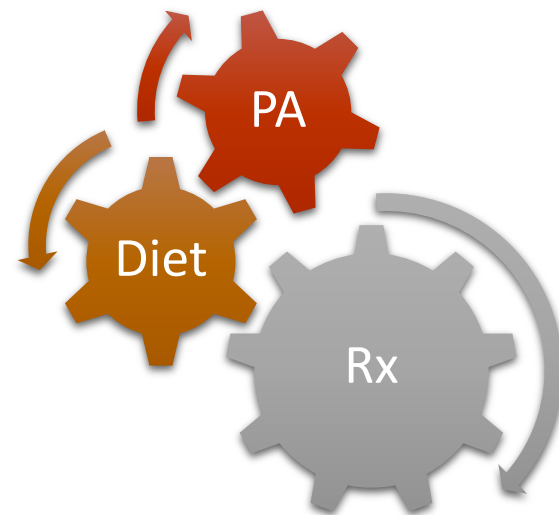
Objectives



- Describe a strategy for initial discussion of lifestyle changes to promote better cardiovascular health.
- Describe effective ways to promote physical activity among patients at high risk for cardiovascular disease.
- Describe the impact of lifestyle changes upon improved control of hypertension, diabetes, and lipid disorders.

Facilitating Outcomes in Diabetes and Cardiovascular Disease

- Lifestyle behavior modification
 - Physical activity
 - Dietary patterns
- Pharmacologic treatment



When We Are No Longer in Balance

- Challenges to maintaining glucose
 - Poor insulin production
 - Poor insulin action
 - Glucose/carbohydrates intakes



Establishing a Path to Lifestyle Behaviors



- Guidelines offer focus on lifestyle behaviors balanced with pharmacologic therapies
- Patient commonly perceive medications to cover the behaviors not changed
- Lifestyle behavior change perceived to be something they *should do*
 - Not a priority until directly addressed by PCP

Translating these Guidelines into Food



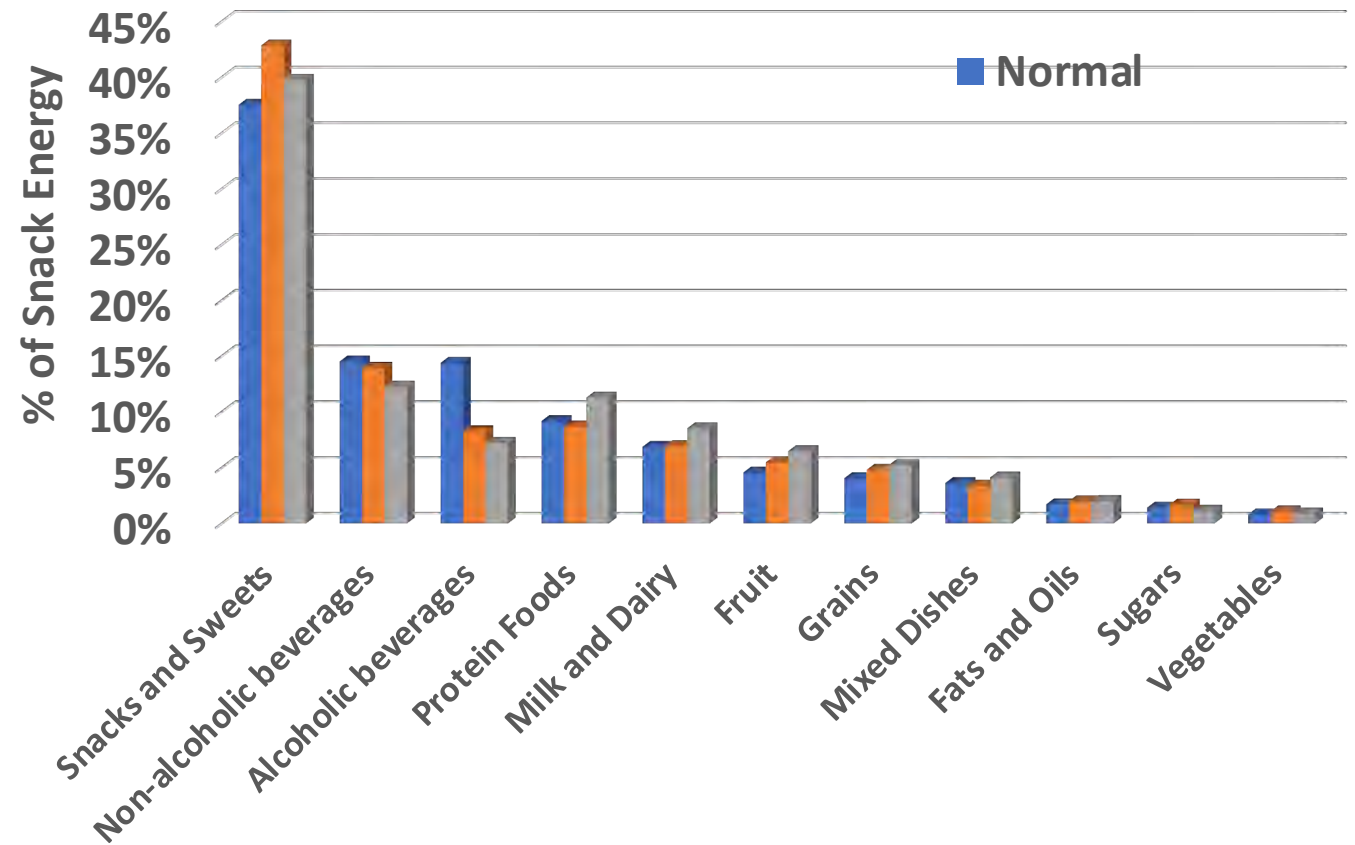
- US Preventive Service Task Force recommends moderate to high intensity lifestyle to facilitate behavior change
 - Medium- (31-360 minutes) to high-intensity (>360 minutes) lifestyle interventions
 - Consider your limitations
 - Stay in your lane (scope of practice and licensure)
- Lifestyle behavior modification requires application of guidelines to patients' personal situations
 - Personal adaptations require time
- Recommendations are focused on nutrient intakes and overall food intakes (daily or weekly)
 - Individuals eat food and meals and must translate big picture to fork

Strategies in Eating Patterns

- Make all meals matter
 - Adults who skip meals shown to have poorer intakes at other eating times
- Addressing the foods AND the beverages
 - Sources of energy, carbohydrates and added sugars masked in drinks
 - Quantities and contributions underappreciated by consumed

Strategies in Eating Patterns

- Snacking contributes a meal's worth of energy without the nutrition
 - 20-25% of the day's energy intakes, 40% of the added sugars during snack
- Patients with diabetes have better added sugar intakes, but poorer diet quality



Physical Activity Recommendations



- 150 min/wk moderate activity
 - At least 3 d
 - No more than 2 cons days without activity
- 2-3x/wk resistance activity
 - Non-consecutive days
- Flexibility and balance training 2-3x/wk
- Limit sedentary/screen time
 - Movement every 30 min

https://care.diabetesjournals.org/content/42/Supplement_1/S46.long

Diabetes Prevention Program – The Story of Hope



- An early 1990s Randomized Clinical Trial to prevent diabetes
- The study had 3 groups of participants
 - Drug: metformin
 - Usual care
 - Lifestyle Behavior group
- 5-7% body weight loss significantly improved health and more likely to prevent diabetes
- 10-year follow up found major reductions in:
 - Systolic blood pressure (2-3 mmHg)
 - Diastolic blood pressure (5-6 mmHg)
 - LDL cholesterol (0.47–0.54 mmol/l)
 - Triglycerides (0.18–0.32 mmol/l)
 - Improved HDL (0.13–0.16 mmol/l)
 - [Diabet Med. 2013 Jan; 30\(1\): 46–55.](#)
- 15-year follow up:
 - T2DM incidence (27% reduction)
 - Lancet Diabetes Endocrinol 2015 Nov;3(11):866-75.



Thank you!

Questions/Discussion