



CARDI•OH

Ohio Cardiovascular and Diabetes Health Collaborative



In partnership with:



Cardi-OH ECHO Tackling Type 2 Diabetes

Thursday, October 1, 2020

Disclosure Statements



- The following planners, speakers, moderators, and/or panelists of the CME activity have financial relationships with commercial interests to disclose:
 - Kathleen Dungan, MD, MPH receives consulting fees from Eli Lilly and Tolerion, institutional research fees from Eli Lilly, Novo Nordisk, and Sanofi Aventis, and presentation honoraria from Nova Biomedical, Integritas, and Uptodate.
 - Siran M. Koroukian, PhD receives grant funds for her role as a co-investigator on a study funded by Celgene.
 - 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.
 - Martha Sajatovic, MD receives grant support as PI of studies with Nuromate and Otsuka, study design consulting fees from Alkermes, Otsuka, Neurocrine, and Health, and publication development royalties from Springer Press and Johns Hopkins University.
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 - Jackson T. Wright, Jr., MD, PhD reports research support from the NIH and Ohio Department of Medicaid and consulting with NIH, AHA, and ACC.
 - These financial relationships are outside the presented work.
- All other planners, speakers, moderators, and/or panelists of the CME activity have no financial relationships with commercial interests to disclose.

Lifestyle approaches to management of type 2 diabetes



Christopher Taylor, PhD, RD, LD

Professor and Director of Medical Dietetics

Director, Coordinated Program in Dietetics

Co-Director, Master of Dietetics and Nutrition Future
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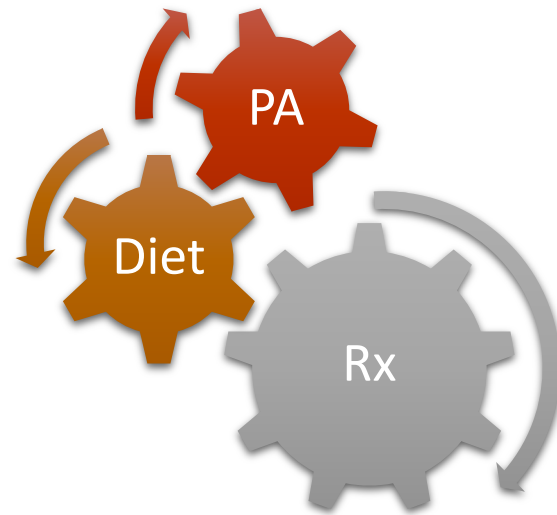
The Ohio State University College of Medicine

Objectives

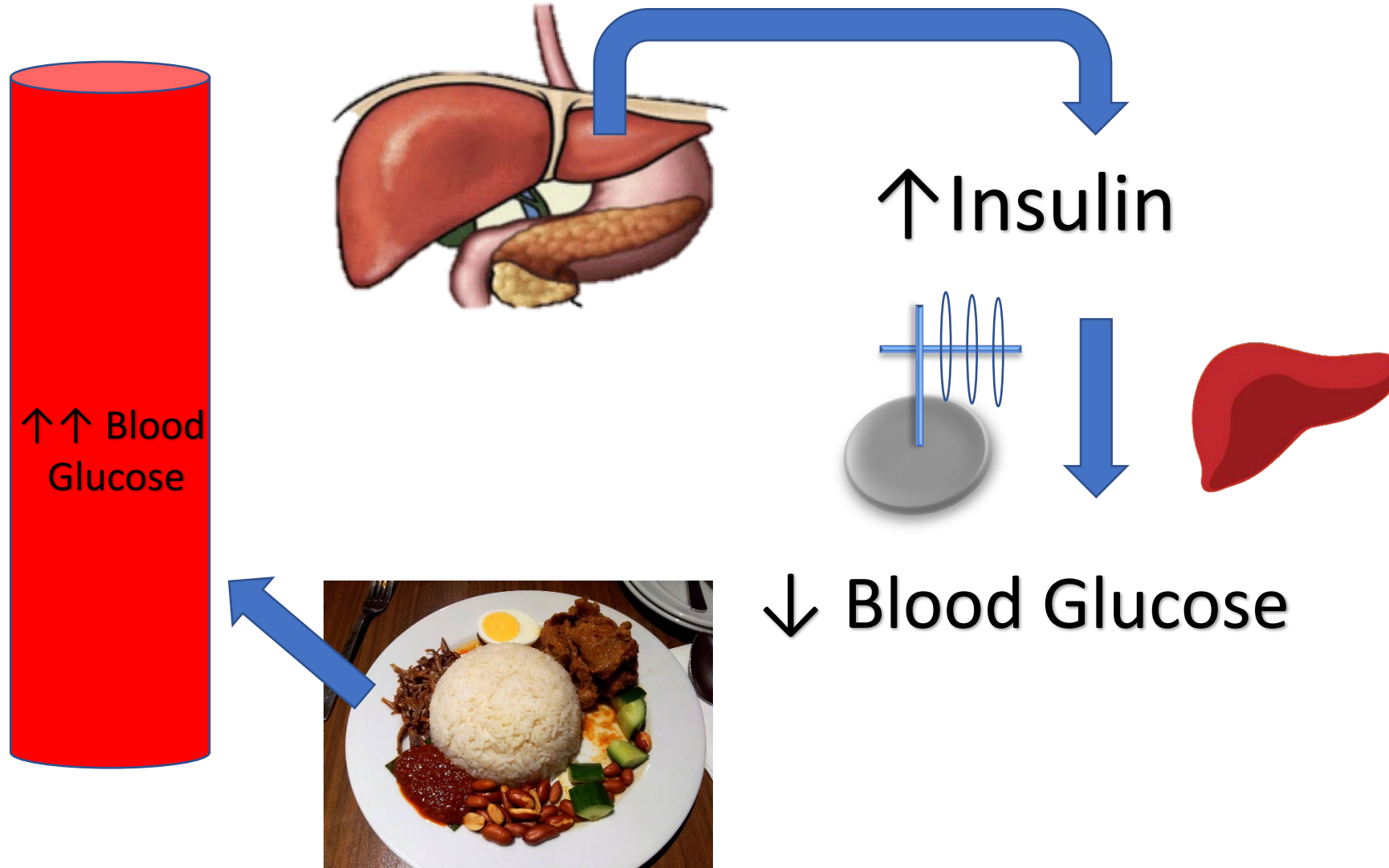
- Describe a strategy for initial discussion of dietary and physical activity changes among patients with type 2 diabetes.
- List and describe a minimum of 3 effective strategies for engaging patients in lifestyle changes to improve control of type 2 diabetes
- Describe the overall impact of sustained lifestyle changes upon morbidity and mortality among patients with type 2 diabetes

Facilitating Outcomes in Diabetes

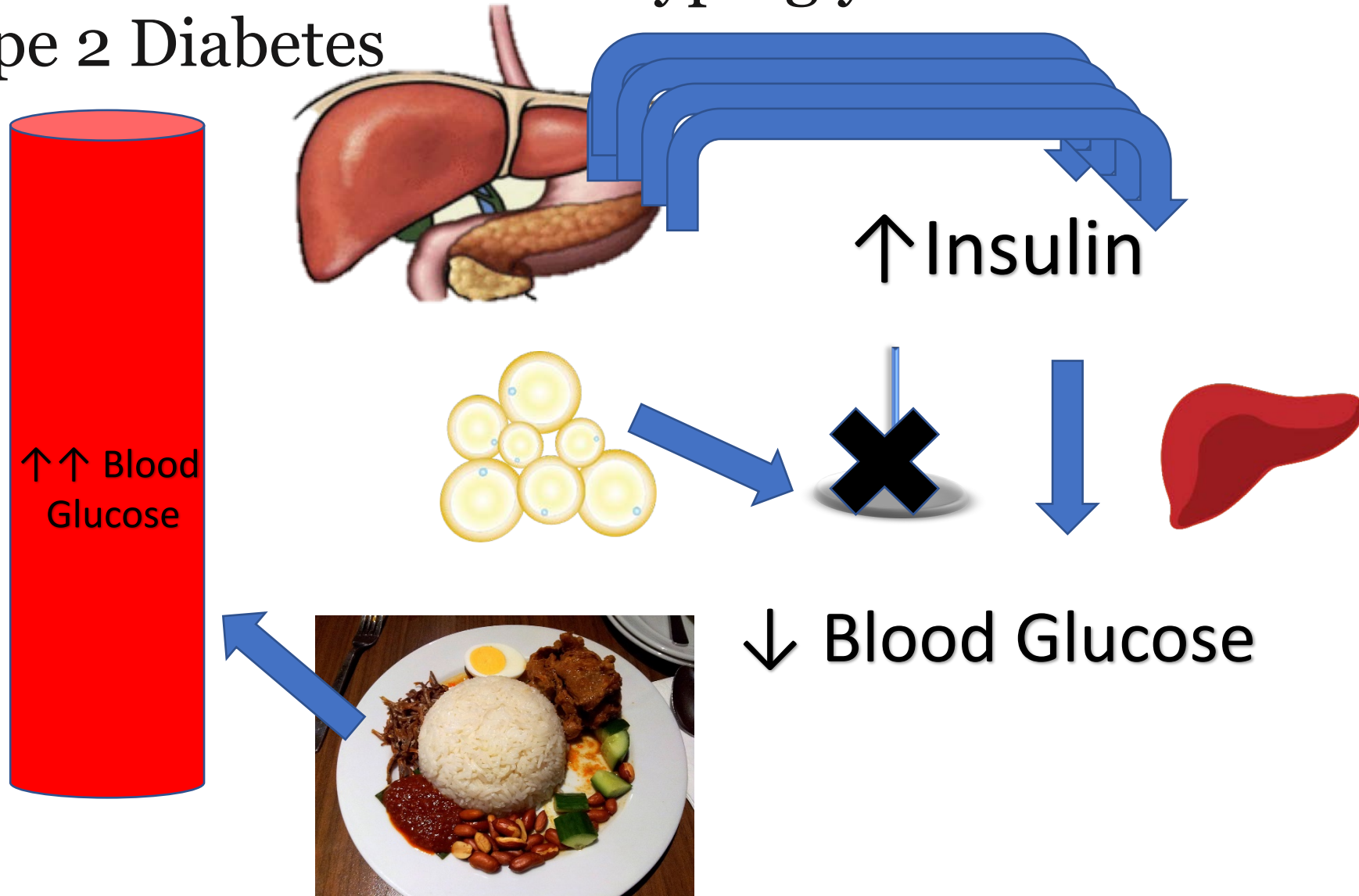
- Lifestyle behavior modification
 - Physical activity
 - Dietary patterns
- Pharmacologic treatment



Process of Maintaining Glucose



Insulin Resistance and Hyperglycemia Type 2 Diabetes



When We Are No Longer in Balance

- Challenges to maintaining glucose
 - Poor insulin production
 - Poor insulin action
 - Too many carbohydrates in



Establishing a Path



- 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

Diabetes Prevention Program – The Story of Hope



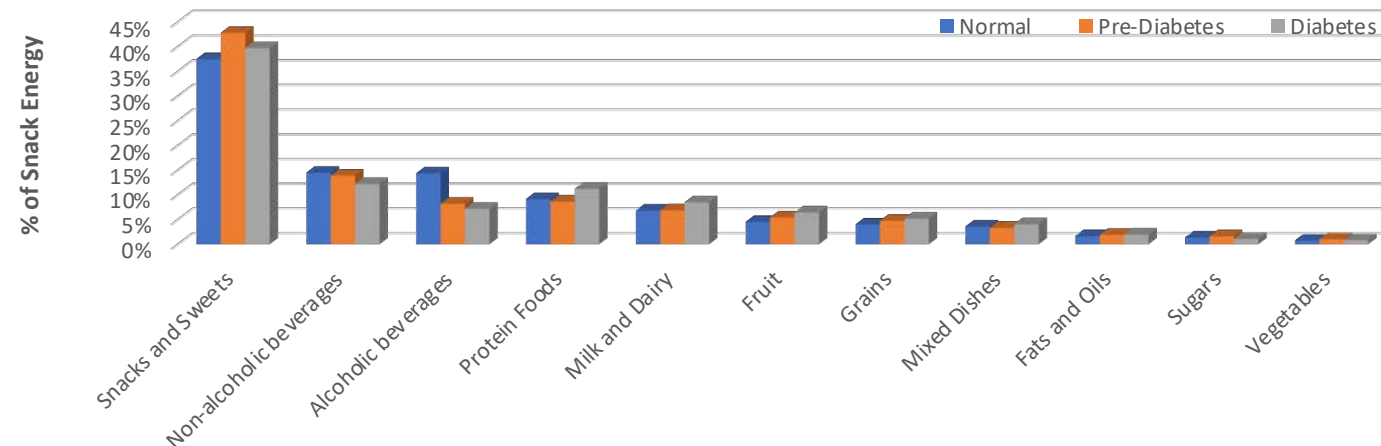
- An early 1990s Randomized Clinical Trial to prevent diabetes
- The study had 3 groups of participants
 - Drug: metformin
 - Usual care
 - Lifestyle Behavior group
- 5-7% body weight loss significantly improved health and more likely to prevent diabetes
- 10-year follow up found major reductions in:
 - 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.

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 poor diet quality



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



Thank you!

Questions/Discussion