CMHC
Cardiometabolic Health Congress

Optimizing Long-Term Weight Loss in Patients with Type 2 Diabetes:

ADVANCES AND EXPERT PERSPECTIVES

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How to Initiate the Conversation about Obesity in Patients with T2DM

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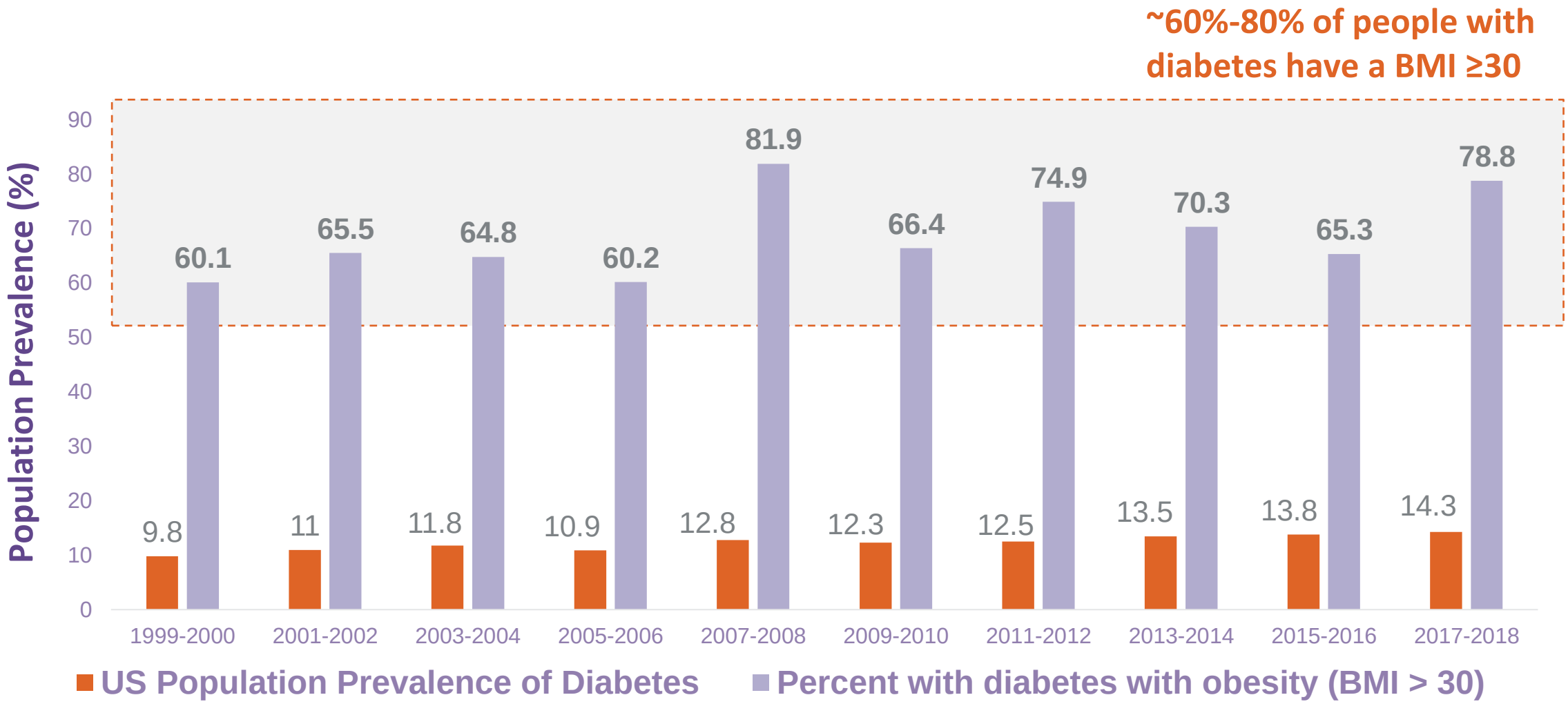
Obesity and T2DM

“I have had type 2 diabetes for 5 years and know that my weight is a contributing factor. I am on 2 antidiabetes medications and my HbA1c is still not at goal.

I have tried several diets on my own in the past and able to lose 20 to 30 lbs., but it always comes back. This is very frustrating, and I do not know what to do.”

Percentage of People with Diabetes who have Coexisting Obesity

NHANES 1999-2018

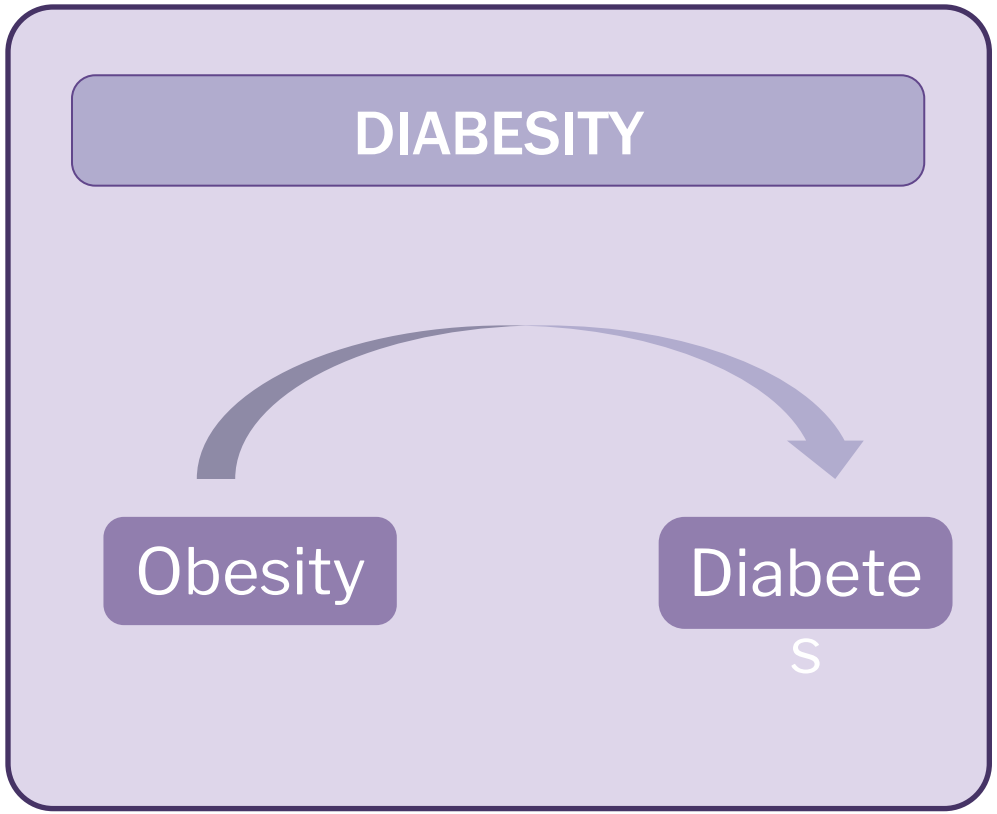


Wang L et al. JAMA. 2021:326:704-716.

Syndemic

[syn-dem-ic] noun

A syndemic or synergistic epidemic involves the clustering of 2 or more diseases within a population; the biological, social, and psychological interaction of those diseases; and the large-scale social forces that precipitate disease clustering in the first place.



https://iaphs.org/syndemics-population-health-qa-anthropologist-emily-mendenhall/syndemic-inforgraphic/

Which of the following obesity phenotypes describes a highest risk for developing cardiometabolic disease?

1. Lower body fat distribution on physical examination
2. Upper body fat distribution on physical examination
3. History of childhood onset weight gain .
4. History of late adulthood onset weight gain

Identifying the High-Risk Obesity Phenotype

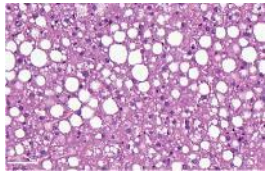
High-Risk Obesities/ Dysfunctional Adipose Tissue	Cardiometabolic Risk Mediators/Comorbidities	Cardiovascular (CV) Outcomes
Central and Visceral Adiposity 	Insulin resistance Glucose intolerance Type 2 diabetes mellitus (T2DM) Blood pressure Abnormal lipid metabolism/dyslipidemia Inflammation Endothelial dysfunction	Cardiovascular events Coronary artery disease Heart failure Arrhythmias/ atrial fibrillation Sudden death

Marie-Eve Piché. Circulation Research. 2020;126,11:1477-1500. Adapted from American Heart Association, Inc., 2020.

Weight loss improves obesity-related metabolic dysfunction

Benefits of Weight Loss

Liver insulin sensitivity

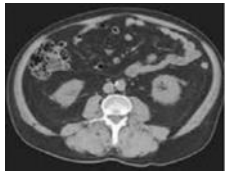


Liver triglycerides

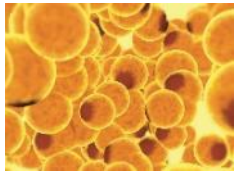
β-cell function

Muscle insulin sensitivity

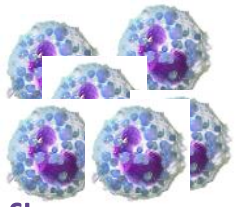
Gene expression in SC adipose



Abdominal adipose tissue



Adipose insulin sensitivity



Inflammatory markers

Magkos et al. Cell Metabolism. 2016;23:591-601.

Weight loss improves obesity-related comorbidities

Benefits of 5%-10% Weight Loss

Reduction in risk of T2DM[1]

Reduction in CV mortality[2]

Improvements in blood lipid profile[3]

Improvements in blood pressure[4]

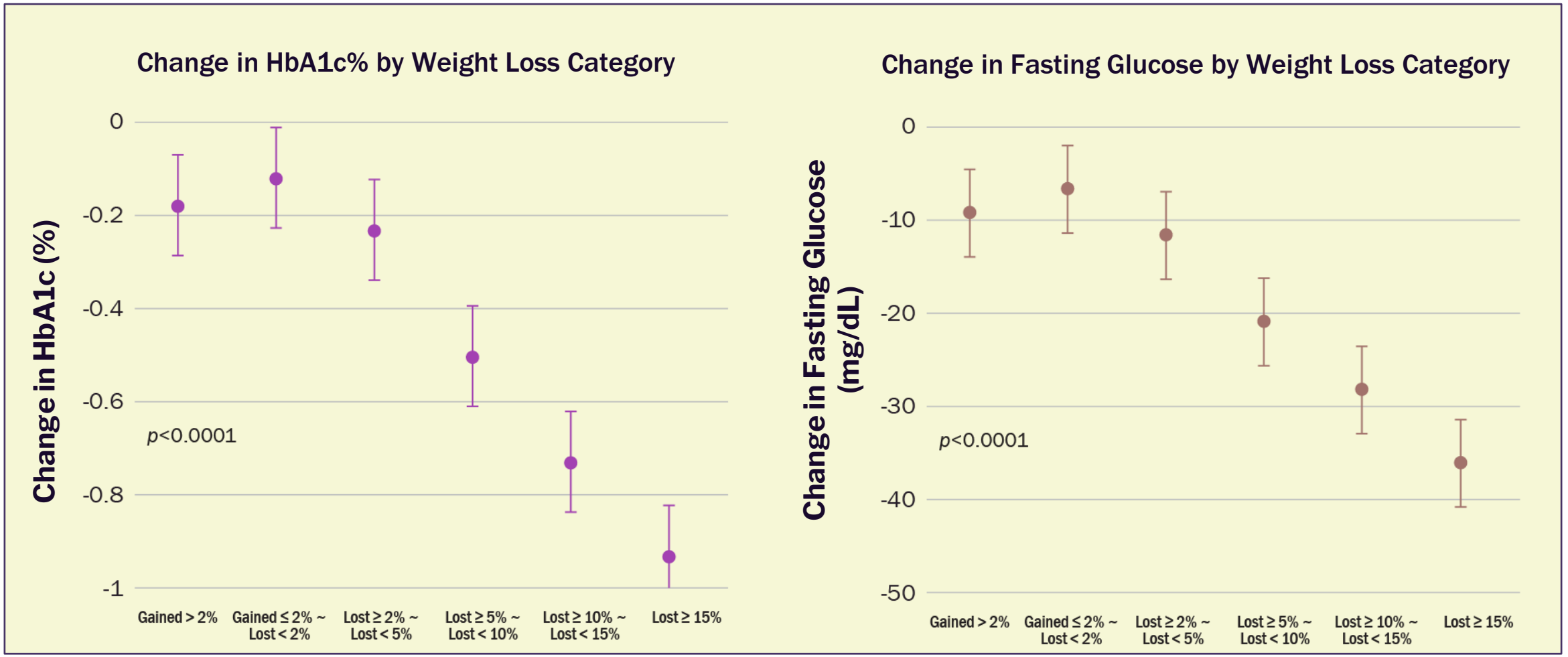
Improvements in severity of obstructive sleep apnea[5,6]

Improvements in health-related quality of life[7,8]

1. Knowler et al. N Engl J Med. 2002;346:393-403. 2. Li et al. Lancet Diabetes Endocrinol. 2014;2:474-480. 3. Datillo et al. Am J Clin Nutr. 1992;56:320-328.
4. Wing et al. Diabetes Care. 2011;34:1481-1486. 5. Foster et al. Arch Intern Med. 2009;169:1619-1626. 6. Kuna et al. Sleep. 2013;36:641-649.
7. Warkentin et al. Obes Rev. 2014;15:169-182. 8. Wright et al. J Health Psychol. 2013;18:574-586.

Benefits of Weight Loss in People with Diabetes:

LOOK AHEAD Study: 1-Year Outcomes Data



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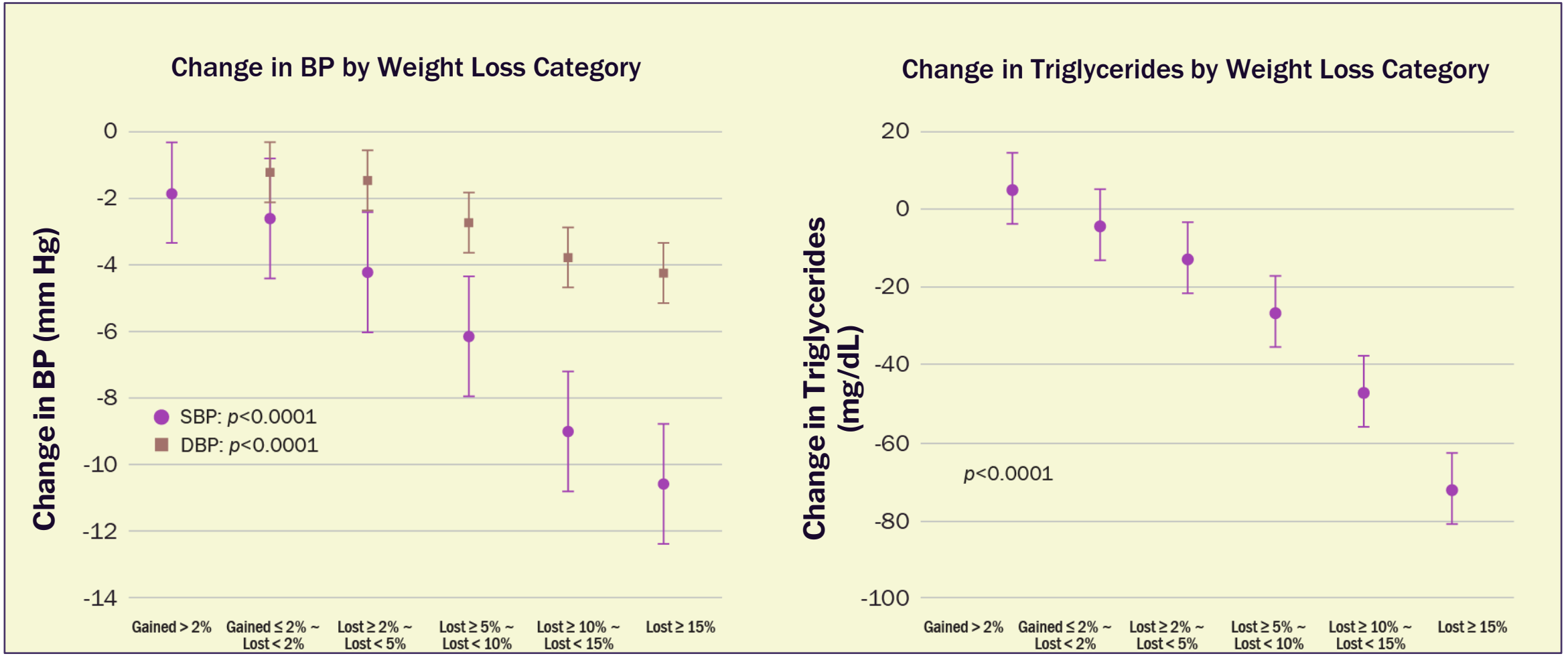

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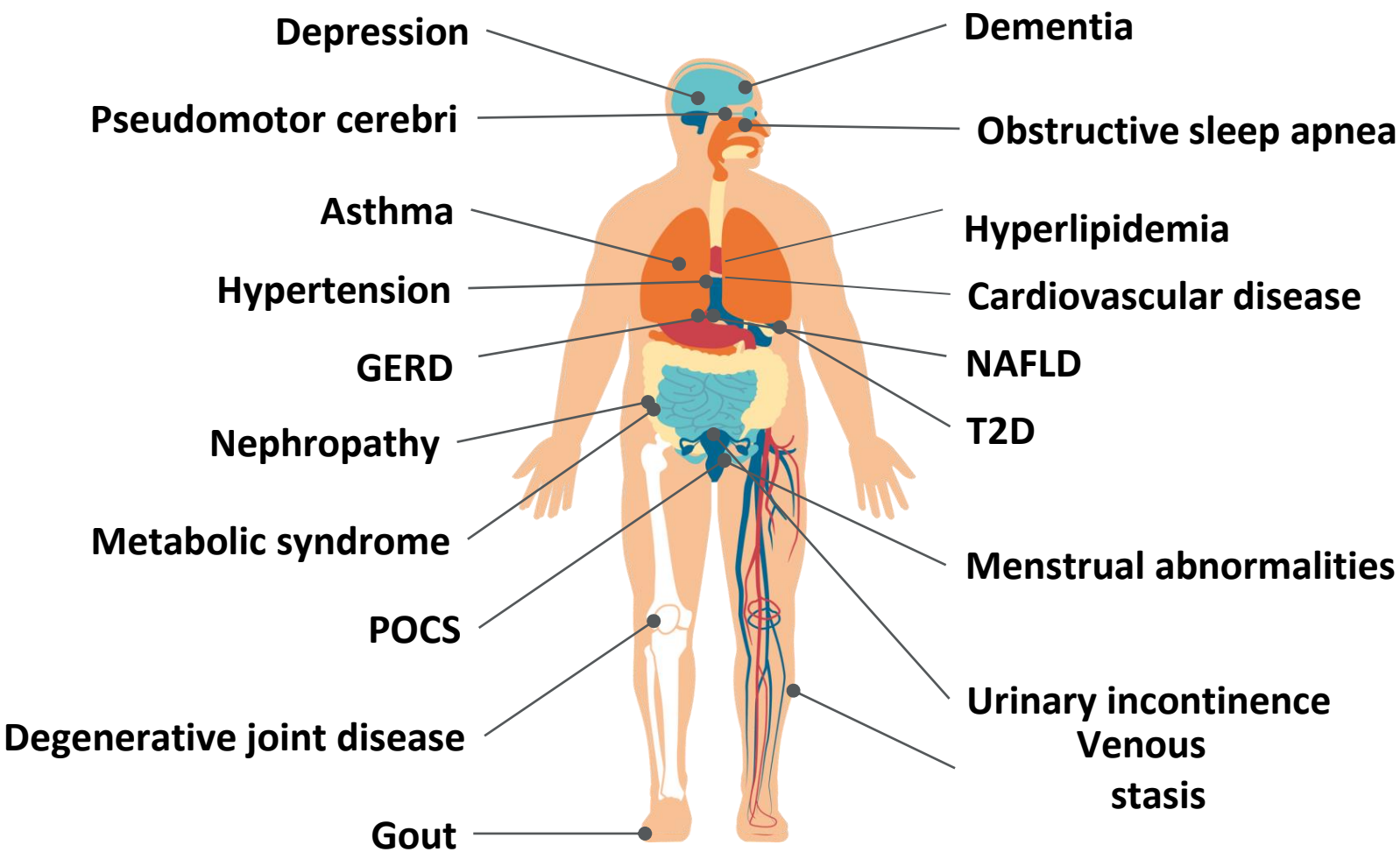
Obesity-Related Diseases



Benefits of Modest Weight Loss

Greater Benefits with Greater Weight Loss

Measures of glycemia[1]	-3%
Triglycerides[1]	
HDL cholesterol[1]	-5%
Systolic and diastolic blood pressure	
Hepatic steatosis measured by MRS[2]	
Measures of feeling and function: Symptoms of urinary stress incontinence[3] Measures of sexual function[4,5] Quality of life measures(IWQOL)[6]	
NASH Activity Score measured on biopsy[7]	-10%
Apnea-hypopnea index[8]	
Reduction in CV events, mortality, remission of T2DM	-15%

1. Wing et al. Diabetes Care 2011;34:81-1486. 2. Lazo et al. Diabetes Care 2010;33:2156–63.3. Phelan et al. Urol. 2012;187:939-44. 4. Wing et al. Diab Care 2013;36:2937-44. 5. Wing et al. Journal of Sexual Medicine 2010 ; 7:156-65. 6. Crosby, Manual for the IWQOL-LITE Measure. 7. Promrat et al. Hepatology 2010;51:121–29. 8. Foster et al. Arch Intern Med 2009;169:1619–26.

Obesity Management for treatment of T2DM; ADA Standard of Practice

The importance of communication style

- Diet, physical activity, and behavioral therapy to achieve and maintain ≥5% weight loss is recommended for most people with type 2 diabetes and overweight or obesity. Additional weight loss usually results in further improvements in control of diabetes and cardiovascular risk.
- Use person-centered, nonjudgmental language that fosters collaboration between patients and providers, including people-first language (e.g., “person with obesity” rather than “obese person”)
  - A person-centered communication style that uses inclusive and nonjudgmental language and active listening, elicits patient preferences and beliefs, and assesses potential barriers to care should be used to optimize patient health outcomes and health-related quality of life. Use people-first language (e.g., “person with obesity” rather than “obese person”) to avoid defining patients by their condition

Diab Care 2022;45 (suppl 1):S113-S124

Which of the following is the best initial approach to discuss body weight with your patient?

1. Inform them that they must lose weight using a sensitive tone
2. Ask if this a good time to discuss their weight
3. Discuss the hazards of obesity and continued weight gain
4. Recommend that they take action today to control their weight

The 6 A's for Behavior change in weight management

ASK	▪ Ask permission to discuss the patient's weight and about preferred terms
ASSESS	▪ Assess patients for obesity or overweight with metabolic risk factors ▪ Assess for patients' readiness and ability to make changes at this time
ADVISE	▪ Advise patients of the health benefits of weight loss and lifestyle change ▪ Use shared decision making to establish next steps
AGREE	▪ Agree with patients on the measurable and achievable goal that will lead to health benefits
ASSIST	▪ Assist patients in creating a management strategy that leverages the entire care (referrals to dietitians, social workers, obesity medicine providers etc.)
ARRANGE	▪ Arrange follow-up to create a structure for accountability and feedback on progress

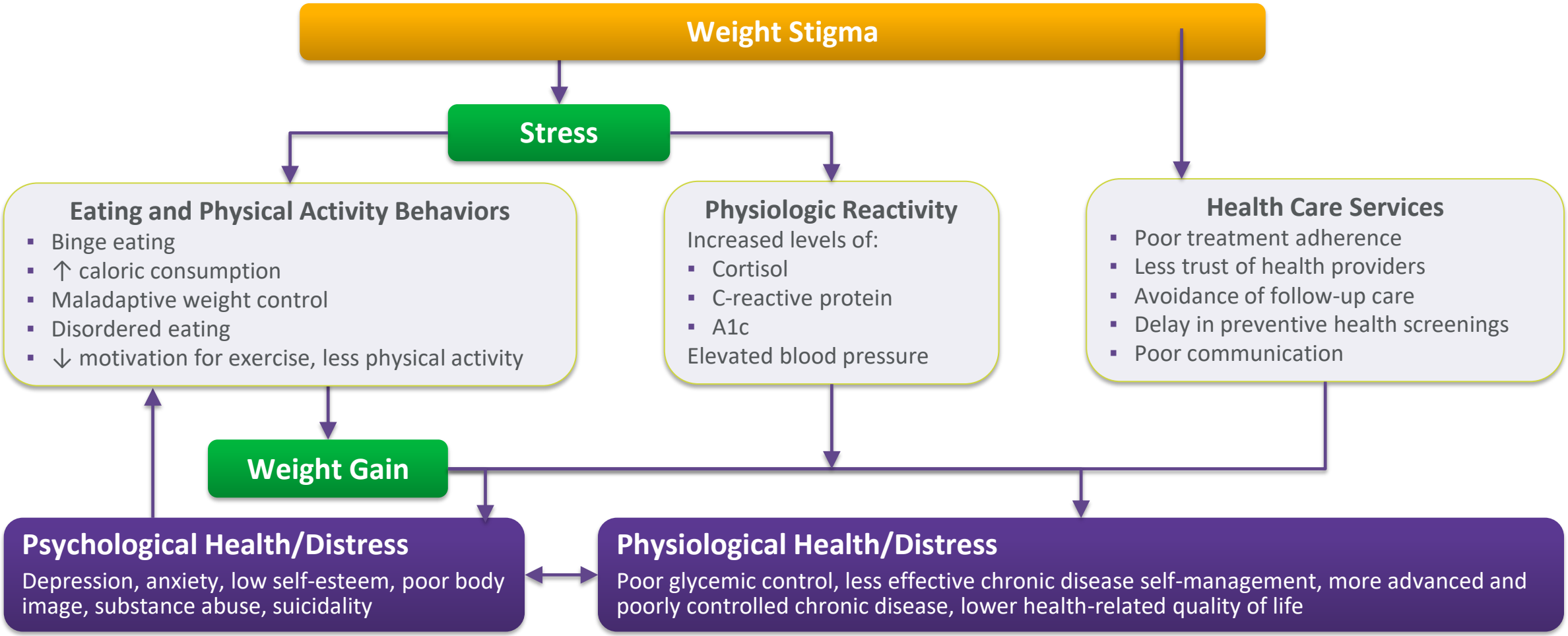
Guide For the Management of Obesity in the Primary Care Setting. https://stop.publichealth.gwu.edu/sites/stop.publichealth.gwu.edu/files/WCW%20guide/WCW%20-%20Guide%20for%20the%20Management%20of%20Obesity%20in%20the%20Primary%20Care%20Setting.pdf. Published 2020. Accessed March 31, 2022.

Weight Bias and Stigma Definitions

- Individuals affected by overweight and obesity face a pervasive form of social stigma based on the typically unproven assumption that their body weight derives primarily from a lack of self-discipline and personal responsibility
  - **Weight bias:** Negative attitudes towards a person because of their weight
  - **Weight Stigma:** Stereotypes and labels assigned to people who have obesity
  - **Weight Discrimination:** Actions against people who have obesity that can cause exclusion or inequities

Rubino F et al. Nature Medicine 2020;26:485-497

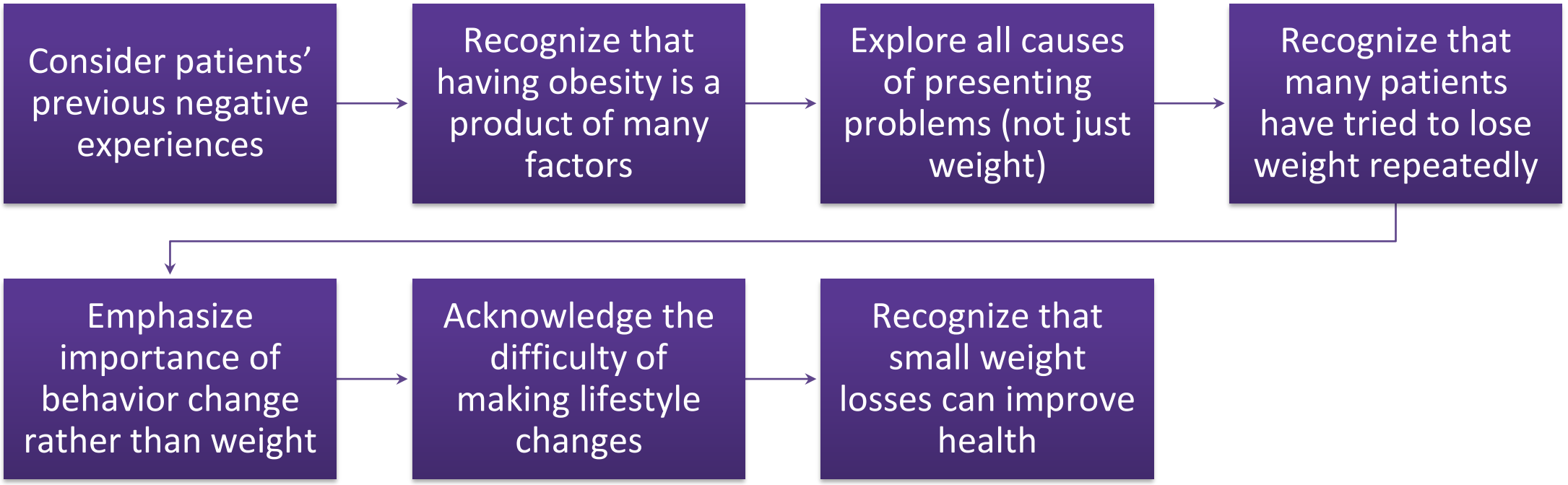
Weight Bias Internalization



Puhl RM, et al. Clin Diabetes. 2016;34(1):44-50.

Recommendations for health professionals

Rudd Center for Food Policy and Obesity



Recommendations for Health Professionals: Questions to Ask Yourself to Identify Your own Attitudes

Rudd Center for Food Policy and Obesity

Do I make assumptions on weight regarding character, intelligence, professional success, health status, or lifestyle behaviors?

Am I comfortable working with people of all shapes and sizes?

Do I give appropriate feedback to encourage healthful behavior change?

Am I sensitive to the needs and concerns of individuals with obesity?

Do I treat the individual or only the condition?

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I have tried several diets on my own in the past and able to lose 20 to 30 lbs., but it always comes back. This is very frustrating, and I do not know what to do."