Trauma Informed Care Strategies for Patients with Larger Bodies

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Disclosures

- None

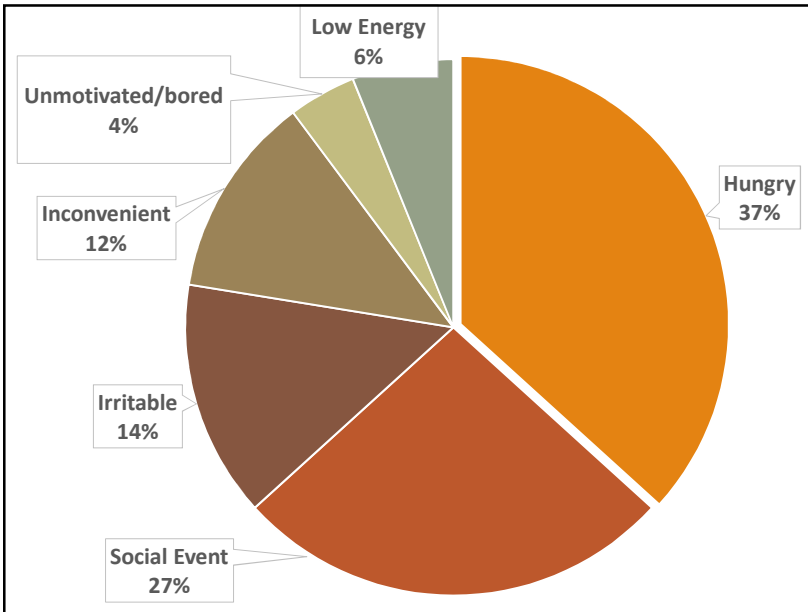
Not everything that is faced can be changed, but nothing can be changed until it is faced.

James Baldwin

Learning Objectives

- Weight Bias/Stigma and Health Outcomes
- Key Principles of Trauma-Informed Care
- Weight-Neutral Strategies for Patient-Centered Care

When is the last time you intentionally tried to lose weight?



"This was much harder than I thought it would be."

"All I could think about was food."

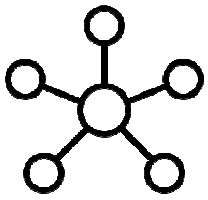
"I was so irritable by mid-week, my roommates were avoiding me."

"I felt like following the diet was a part-time job."

"Being of normal weight, I was never aware of my prejudices."

"I will no longer associate lack of motivation and laziness with overweight."

Cotugna, N., & Mallick, A. (2010). Following a calorie-restricted diet may help in reducing healthcare students' fat-phobia. *Journal of Community Health: The Publication for Health Promotion and Disease Prevention, 35*(3), 321–324.



Pathophysiology

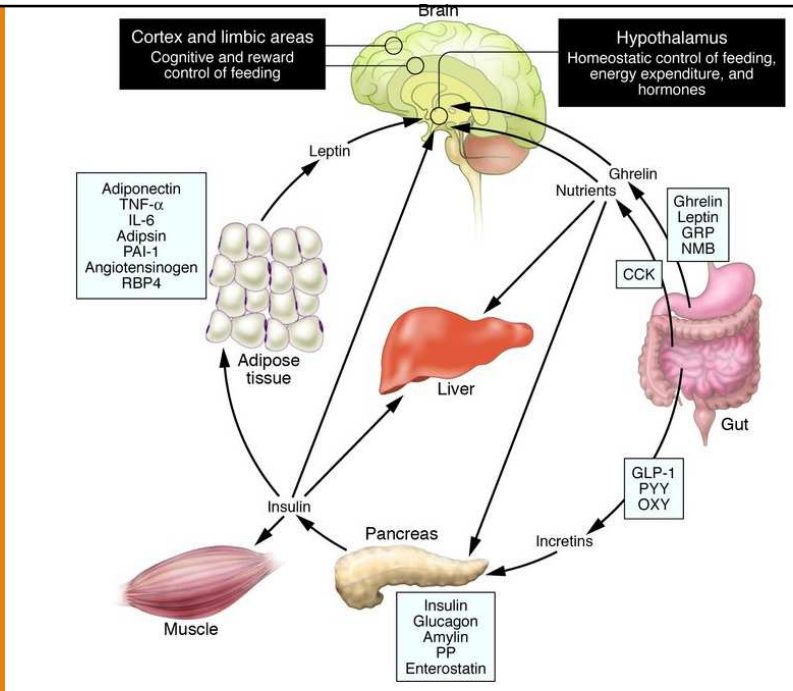
Body Mass Index

$$BMI = \frac{\text{weight (kg)}}{\text{height (m}^2\text{)}}$$

- Normal Weight 18.5-24.9
- Overweight 25.0-29.9
- Class I Obesity 30.0-34.9
- Class II Obesity 35.0-39.9
- Class III Obesity (Severe) >40

The Practical Guide: Identification, Evaluation and Treatment of Overweight and Obesity in Adults. Washington NIH Pub. No. 00-4084 2000

Appetite Regulation System



Gadde, K.M. et al. J Am Coll Cardiol. 2018;71(1):69-84

Chronic Prolonged Positive Energy Balance

Adipocyte Hyperplasia

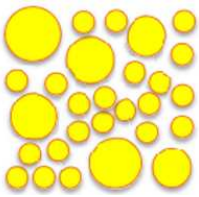
(many small adipocytes)

Normal insulin sensitivity

Normal insulin

Normal glucose

Normal lipids



Adipocyte Hypertrophy

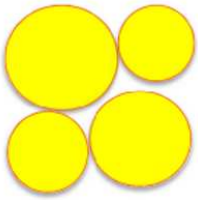
(few large adipocytes)

Insulin resistance

↑ Insulin

↑ Glucose

↑ Triglycerides



Tandon P, Wafer, Minchin JEN. Adipose morphology and metabolic disease. J Exp Biol. 2018;221 (Pt Suppl 1)

Jensen MD. Role of body fat distribution and the metabolic complications of obesity. J Clin Endocrinol Metab. 2008;93 (11 Suppl 1):S57-S63. doi: 10.1210/jc.2008-1585

Goossens GH. The Metabolic Phenotype in Obesity: Fat Mass, Body Fat Distribution, and Adipose Tissue Function. Obes Facts. 2017;10(3):207-215

Clinical Limitations of BMI in Adults

On average, older adults and women tend to have more body fat than younger adults and men for an equivalent BMI.

Muscular individuals or highly-trained athletes, may have a higher BMI due to increased muscle mass not excess adiposity.

https://www.cdc.gov/obesity/downloads/bmiforpactitioners.pdf

https://www.dailymail.co.uk/sport/article-2503371/Can-guess-sport-shape-athletes-body.html

Misclassification of Cardiometabolic Health

N = 40,420 individuals aged 18+. Population frequencies of metabolically healthy vs unhealthy (as measures by blood pressure, triglycerides, cholesterol, glucose, insulin resistance and c-reactive protein) were stratified by BMI.

Nearly ½ of overweight individuals, 29% of obese individuals and 16% of severe obesity were metabolically healthy. Over 30% of normal weight individuals were unhealthy. This results in the misclassification of nearly 75 million people based on BMI alone

Tomiyama, A., Hunger, J., Nguyen-Cuu, J. et al. Misclassification of cardiometabolic health when using body mass index categories in NHANES 2005–2012. Int J Obes 40, 883–886 (2016). https://doi.org/10.1038/ijo.2016.17
2016 – International Journal of Obesity

Cultural, Historical, & Gender Acknowledgment

- Historical harm of BMI.
- Use of BMI for racist exclusion.
- BMI cutoffs are based primarily on data collected from previous generations of non-Hispanic white populations and does not consider a person's gender or ethnicity.

https://www.obesityaction.org/education-support/resources/oac-image-gallery/

Weight Bias and Stigma

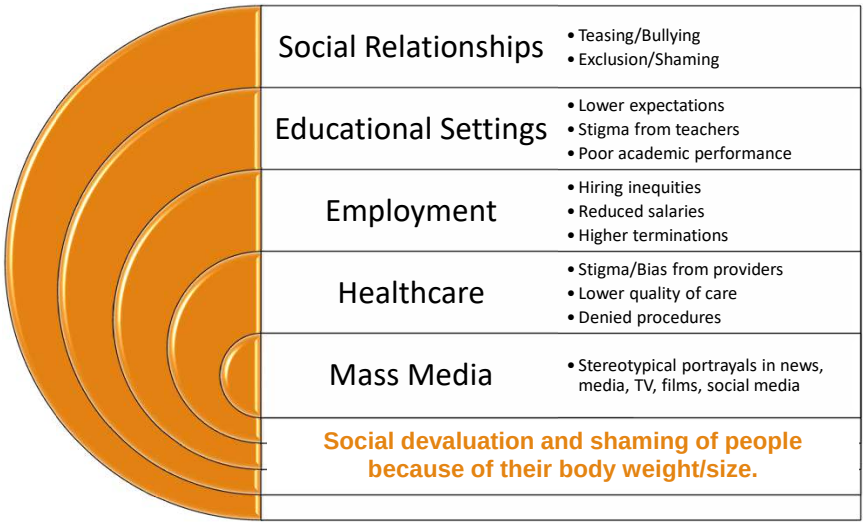
Weight Bias - Negative attitudes towards a person because of their weight

Weight Stigma - Stereotypes and labels assigned to people in larger bodies

Weight Discrimination - Actions against people who have obesity that can cause exclusion or inequities

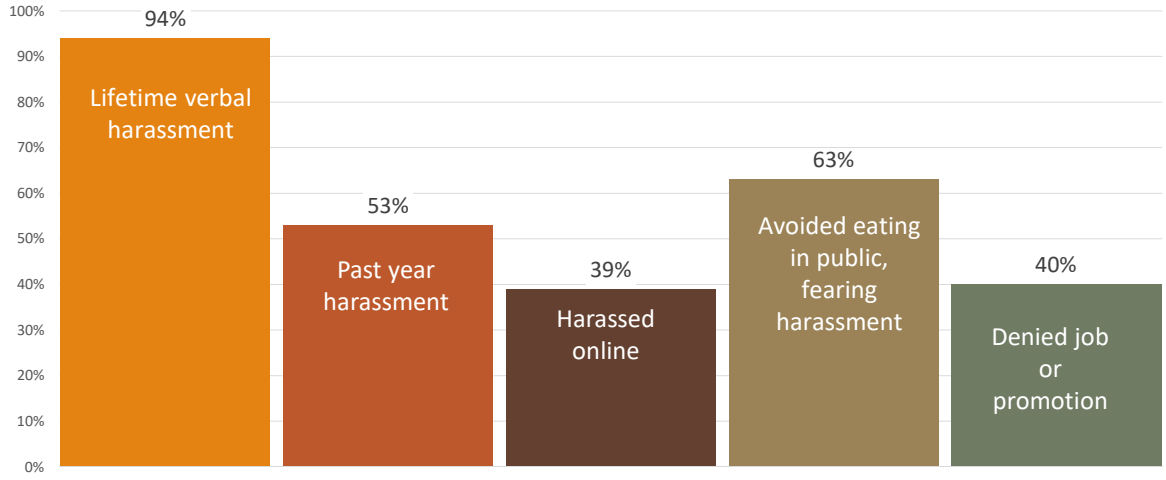
Internalized Weight Bias - Recurring confrontations with stereotypes and misconceptions in the environment can lead to negative self-perception

Weight-Based Stereotypes

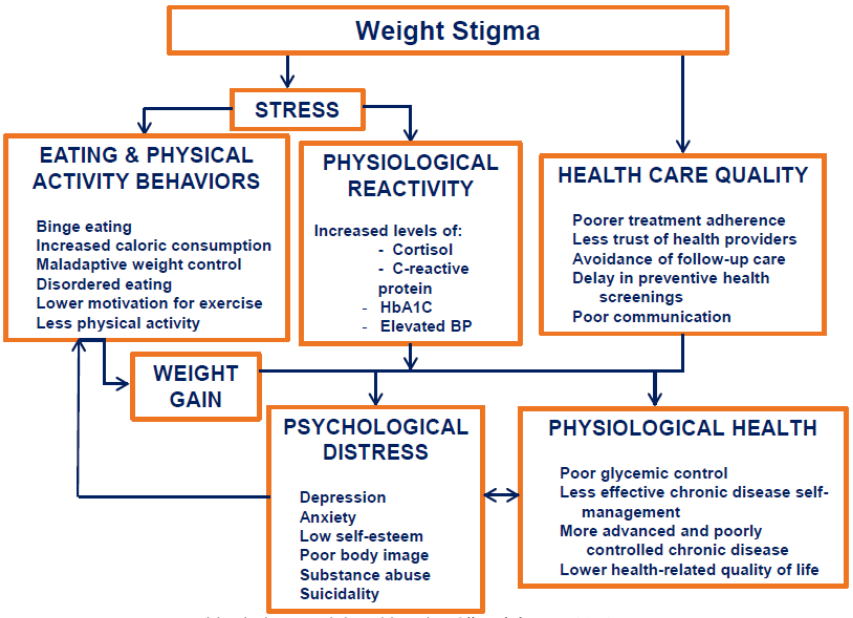


Adapted from *Weight Stigma: Harmful Health Consequences and Implications for Patient Care.* Rebecca Puhl, PhD

Fat Census: Experiences of Harassment



2017 Fat Census Executive Summary — Free Figure Revolution



Puhl, Phelan, Nadglowski, Kyle. *Clin Diabetes.* 2016.

Weight Stigma and Life Expectancy

In the National Health and Retirement Study (n=13,692) and the Midlife in the United States Study (n=5079), weight discrimination was associated with a 32% increase in mortality, *independent of BMI*.

After adjusting for current BMI, individuals facing weight stigma are:

- 72% more likely to develop obesity
- 69% more likely to remain with obesity

Sutin, Stephan, Terracciano, Psychological Science 2015; Sutin & Terracciano. Plos One 2013

Joint International Consensus Statement for Ending Stigma of Obesity

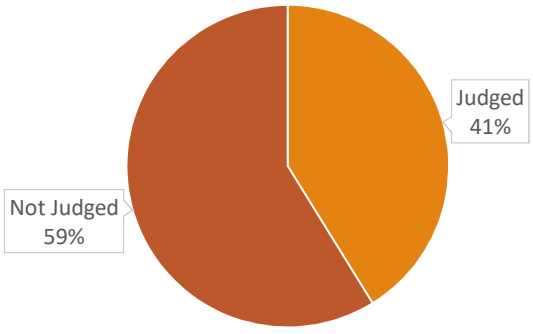
Weight bias and stigma can result in discrimination and undermine human rights, social rights, and the health of afflicted individuals

- Obesity is primarily caused by voluntary overeating and a sedentary lifestyle
- Obesity is a choice, not a condition
- Severe obesity is reversible by voluntarily eating less and exercising more

Rubino F, Apovian CM, et al. Nat Med. 2020 Apr;26(4):485-497.

"Tackling weight stigma is not only a matter of human rights and social justice, but also a way to advance prevention and treatment of diseases."

Percentage Achieving Clinically Significant Weight Loss (p<0.001)



Gudzune et al. Prev Med 2013. Rubino, Puhl, Cummings, et al. *Nature Medicine.* 2020; Srivastava et al., *Ped Obes.* 2021.

For every 1-unit increase in internalized weight stigma

The odds of maintaining weight loss <u>decreased</u> by 28%

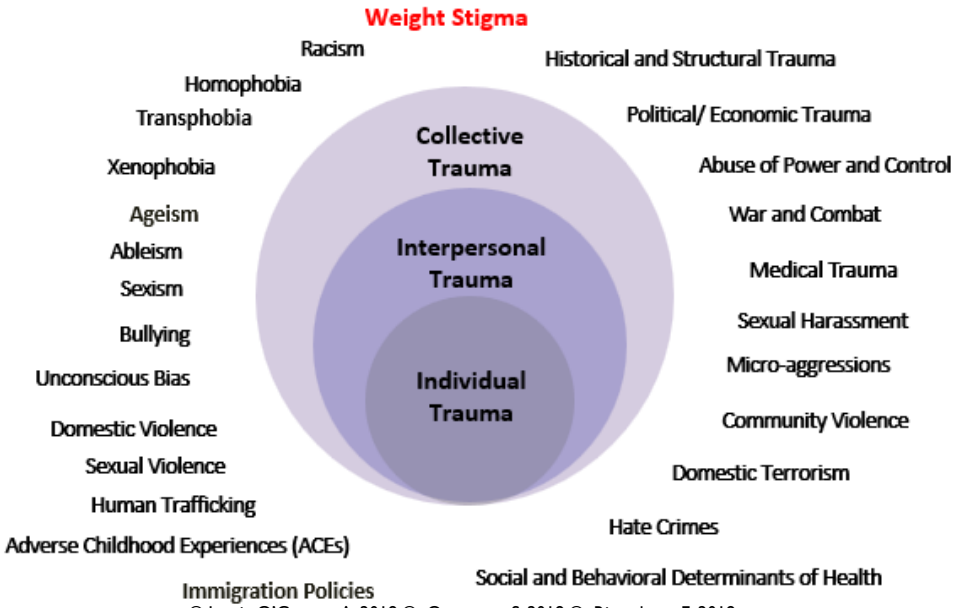
Puhl, Quinn, Weisz, Suh. *Ann Beh Med. 2017*

Weight Neutral Approaches for Patient-Centered Care

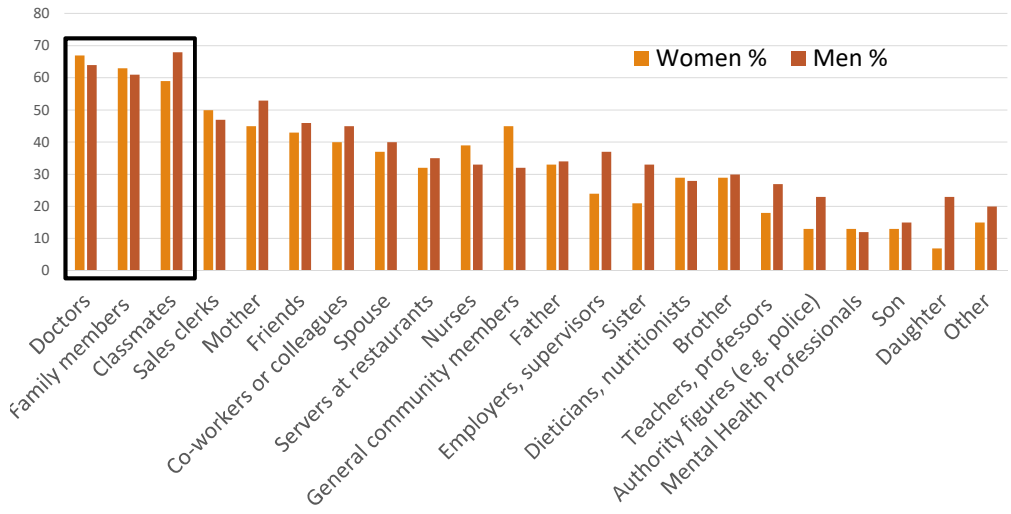
I'm no longer accepting the things I cannot change.

I'm changing the things I cannot accept.

- Angela Davis



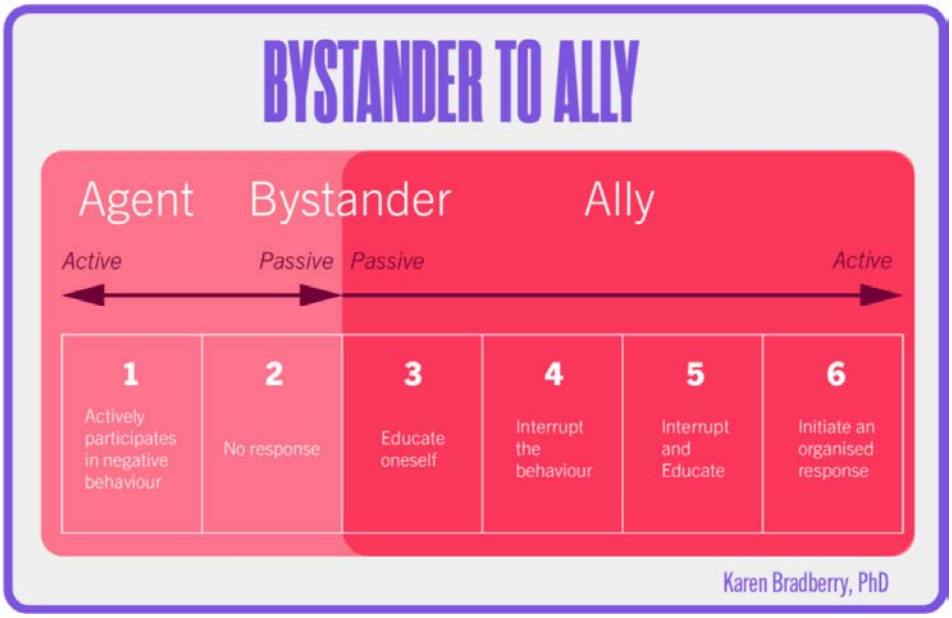
Interpersonal Sources of Weight Stigma



Puhl &Brownell. Obesity 2006

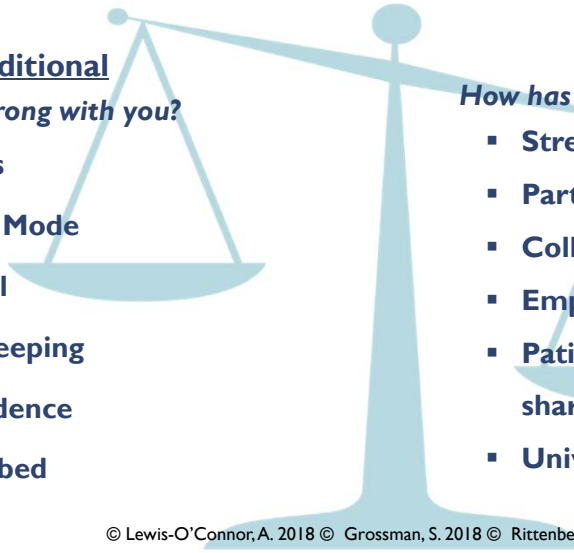
Why Trauma Informed Care for Fat Patients?

- Weight stigma IS a form of trauma that has significant physical and mental health effects.
- Traumatic experiences greatly influence how people access, experience and provide healthcare.
- Weight stigma affects both patients and staff.



https://academy.florence-nightingale-foundation.org.uk/courses/allyship/lessons/au1-5-understanding-privilege/

Philosophical Shift: Trauma-Informed Healthcare



Traditional

What's wrong with you?

- **Deficits**
- **Expert Mode**
- **Control**
- **Gate-keeping**
- **Dependence**
- **Prescribed**

Trauma-Informed

How has what happened affected you?

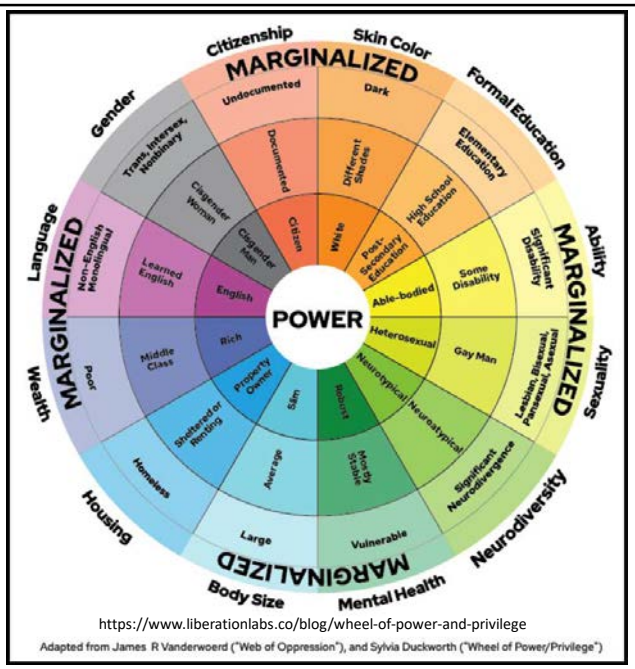
- **Strengths and Resilience**
- **Partnership model**
- **Collaboration and Mutuality**
- **Empowerment, Voice and Choice**
- **Patients choose how much to share**
- **Universal Awareness**

Trauma-Informed Care

Strength-based approach

Grounded in understanding and responding to the impact of trauma

Emphasizes physical, psychological and emotional safety for providers and patients



https://www.liberationlabs.co/blog/wheel-of-power-and-privilege

Adapted from James R Vanderwoerd ("Web of Oppression"), and Sylvia Duckworth ("Wheel of Power/Privilege")

Awareness of Implicit Beliefs

Body language
Tone of voice
Facial expressions
Gestures
Eye contact
Spatial distance
Comments and dialogue

Implicit Association Test (IAT) implicit.harvard.edu/implicit

The 4 C's of Trauma-Informed Care

Calm	Contain	Care	Cope
Pay attention to how you are feeling. Breathe deeply and calm yourself to model and promote calmness for your patient and co-workers.	Limit trauma history details. Cultivate and maintain psychological safety for yourself and your patient	Practice self-care, self-compassion and cultural humility to normalize and de-stigmatize trauma symptoms and adverse coping behaviors.	Emphasize coping skills, promote positive interactions and interventions that build resilience

M.R. Gerber (ed.), Trauma-Informed Healthcare Approaches https://doi.org/10.1007/978-3-030-04342-1_2

TIC Strategies for Larger Patients

- Use language that is supportive and empowering about eating habits, physical activity, and other health promoting behaviors
- Minimize language that might unintentionally communicate bias, blame, or negative judgment *(i.e. morbidly obese).*
- Recognize and respect diverse preferences of language based on gender, BMI, race/ethnicity

Miller WR, Motivational Interviewing. 2002 Lukowski, A. Motivational Interviewing: The Essentials, OMA (formerly ASBP) Obesity S

TIC Strategies for Larger Patients

What words would you feel most comfortable using as we talk about your weight?

Have you had any positive or negative healthcare experiences it would be helpful for me to know as I care for you today?

"Are there any concerns with your body you would like me to be aware of?"

"Is it OK if I continue with the exam, or would you prefer me to stop?"

Miller WR, Motivational Interviewing. 2002 Lukowski, A. Motivational Interviewing: The Essentials, OMA (formerly ASBP) Obesity S

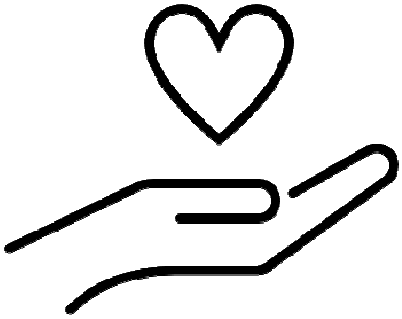
TIC Strategies for Larger Patients

Consider only weigh patients when medically necessary

Ask for consent before weighing with clear option to opt out

Providers can mitigate bias by waiting until the end of appointment to decide if patient really needs to be weighed

Winter et al., 2023



Treatment Guidelines

*"abnormal or excessive fat accumulation **that presents a risk to health**."*

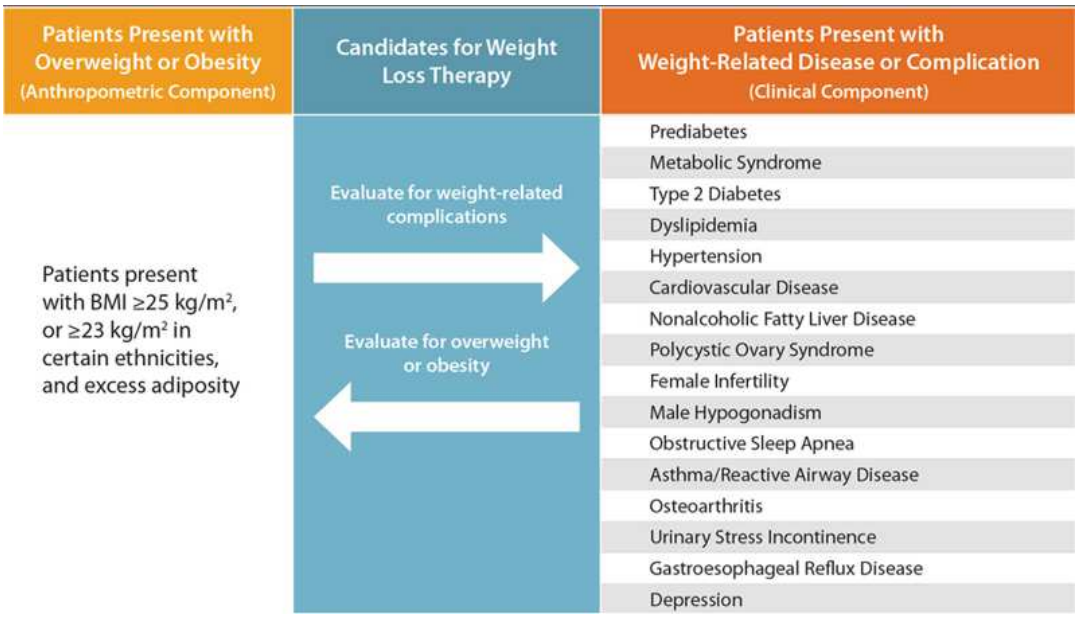
- World Health Organization

*"**chronic, relapsing, multi-factorial, neurobehavioral disease**, wherein an increase in body fat promotes **adipose tissue dysfunction** and **abnormal fat mass physical forces**, resulting in adverse **metabolic, biomechanical, and psychosocial health** consequences."*

- Obesity Medicine Association

*"**multi-causal chronic disease** recognized across the life-span resulting from long-term positive energy balance with development of **excess adiposity** that over time leads to **structural abnormalities, physiological derangements,** and **functional impairments** that **increases the risk** of developing **other chronic diseases** and is associated with **premature mortality.** As with other chronic diseases, obesity is distinguished by **multiple phenotypes, clinical presentations, and treatment responses**.*

- The Obesity Society



Endocrine Practice 2016 221-203DOI: (10.4158/EP161365.GL)

Common Weight Promoting Medications

Anti-depressants, anti-anxiety and mood stabilizers
- SSRI, TCA, MAOIs, lithium, benzodiazepines

Antipsychotics

Diabetes medications
- insulin, sulfonylureas, thiazolidinedione

Steroid hormones
- synthetic progestins, contraceptives, corticosteroids, chemotherapy

Anticonvulsants

Anti-migraine

Neuropathic pain

Opioids
- all opioids may decrease metabolic rate and exercise tolerance

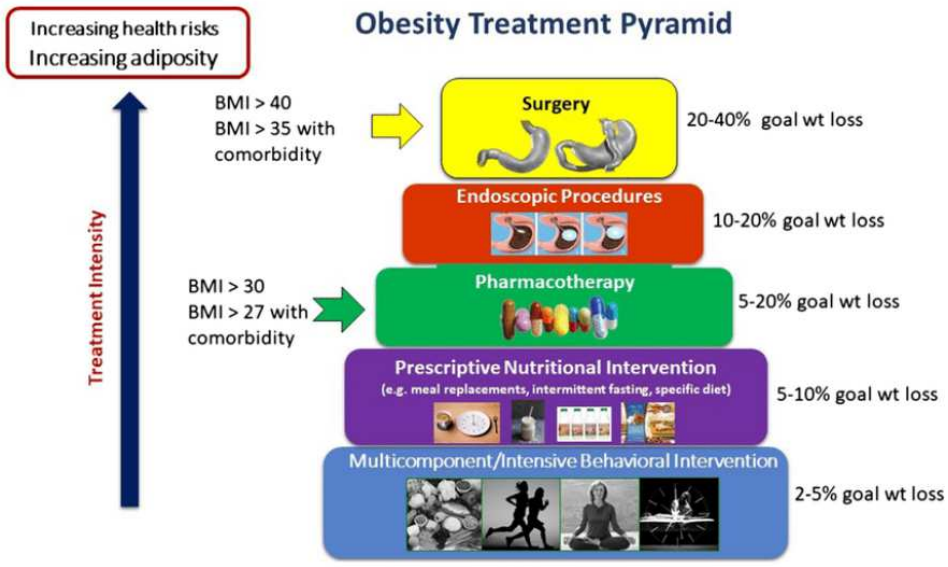
Anti-hypertensives
- beta-blockers, alpha-blockers, calcium channel blockers

Antihistamines

Hypnotics
- Remeron, zolpidem, doxepin

Anti-retroviral

https://obesitymedicine.org/blog/medications-that-cause-weight-gain/



Obesity treatment pyramid developed by Angela Fitch, MD

Lifestyle Modifications

Nutrition

- Increased intake of nutrient dense foods
- Individualize based on personal and cultural preferences
- Evidence-based meal plans include: Mediterranean, DASH, TLC
- Utilize the expertise of dietitians/nutritionists at the patient's request

Physical Activity

- Aerobic physical activity that is voluntary and enjoyable, ideally > 150 minutes /week over 3-5 days
- Resistance exercise involving major muscle groups 2-3 times per week
- Reduce sedentary behavior
- Individualize recommendations based on personal preferences, access to safe spaces/facilities and physical limitations
- Utilize the expertise of personal trainers and physical/occupational therapists

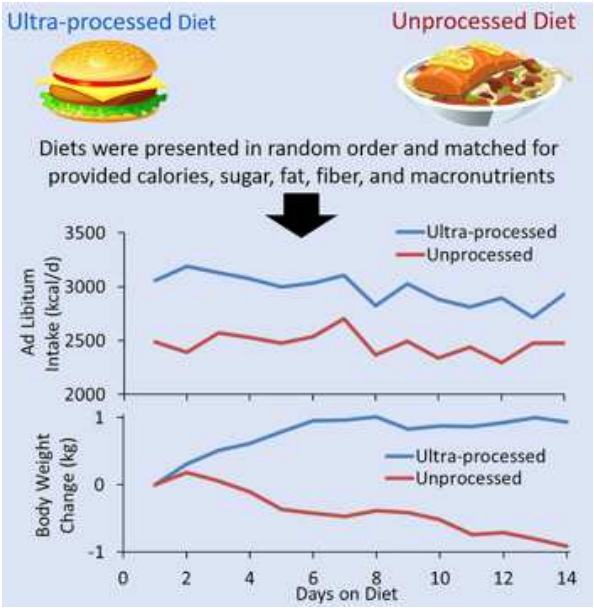
Endocrine Practice 2016 221-203 DOI: (10.4158/EP161365.GL)

Lifestyle Modifications

Behavior

- Self-monitoring (food intake, physical activity, sleep, stress levels)
- Goal setting (SMART goals)
- Community support
- Stimulus control
- Stress management
- Sleep hygiene
- Cognitive restructuring
- Motivational interviewing
- Mobilization of social support and structures, accountability partners
- Psychological screening, evaluation, counseling and treatment if indicated

Endocrine Practice 2016 221-203 DOI: (10.4158/EP161365.GL)



Hall et al., 2019, Cell Metabolism 30, 67–77 July 2, 2019

Diet Culture

"Diet culture" refers to a set of beliefs that **values thinness, appearance, and shape above health & well-being**. Additionally, the concept places importance on restricting calories, normalizes negative self-talk, and labels certain foods as "good" and "bad". Individuals subjected to "diet culture" messages have been conditioned to believe that not only does thinness and dieting equate to health, but that the **pursuit of health makes one person morally superior to another.**

Anita Daryanani, UCSD Dietetic Intern https://recreation.ucsd.edu/2021/01/diet-culture-social-media

Indications for Pharmacotherapy

Patients who failed to adequately benefit from lifestyle modifications and physical activity alone **AND** BMI > 30 OR BMI >27 + 1 obesity related co-morbidity

AOMs generally need to be used chronically. The selection of the medication or intervention should be based on the clinical profile and needs of the patient, including, but not limited to

Co-morbidities

Patients' preferences

Costs

Access to the therapy

Table 1: FDA-approved AOMs – recommendations based on comorbidities
(√√ preferred; √ may be used; - avoid use)

	Preferred AOMs					Alternate AOMs	
Disease State[a]	Semaglutide	Liraglutide	Tirzepatide[b]	Bupropion-naltrexone[b]	Diethylpropion or Phentermine[c] ± Topiramate	Plenity[d]	Orlistat
History of prior MI, prior stroke, symptomatic peripheral arterial disease	√√	√	√	√	avoid	√	√
Heart failure with preserved ejection fraction	√√	√	√	√	avoid	√	√
Hypertension	√	√	√	√[e]	avoid	√	√
Depression/ anxiety	√	√	√	√√[f]	√√	√	√
End-stage renal disease	√√	√√	√√	avoid	avoid	√	√
Gastrointestinal reflux disease	√	√	√	√√	√√	avoid	√
Glaucoma (angle closure)	√√	√√	√√	avoid	avoid	√	√
Hepatic impairment (severe)	√√	√√	√√	avoid	avoid	√	avoid
Nephrolithiasis	√	√	√	√√	avoid	√	avoid
Migraine	√	√	√	√	√√	√	√
Opioid use	√	√	√	avoid	√√	√	√
Pancreatitis	avoid	avoid	avoid	√√	√√	√	√
Seizure disorder	√	√	√	avoid	√√	√	√
Type 2 diabetes	√√	√√	√√	√	√	√	√

[a]PA criteria regarding accepted comorbidities varies among payers, [b]not approved in patients less than 18 years, [c]phentermine alone approved for weight loss as short-course therapy (3 months) in patients at least 16 years; [d]approved for adults over the age of 22, [e]avoid in uncontrolled hypertension, [f]for adults 24 years and older (avoid in ages 18-24)

GLP-1 Agonists for Obesity Management

Generic (Brand) Name	Dosing Frequency	Average % Body Weight Reduction (Maximum Dose)**
Tirzepatide (Zepbound)[1]	Once weekly injection	20.9%
Semaglutide (Wegovy)[2]	Once weekly injectable	14.9%
Liraglutide (Saxenda)[3]	Daily injectable	8%

*Additional FDA approved indication to reduce the risk of cardiovascular death, heart attack and stroke in adults with cardiovascular disease and either obesity or overweight patients.

**Trials reflective of non-T2DM patient population.

Jastreboff et al. SURMOUNT -1. *NEJM.* 2022;387:205-216.
Wilding et al. STEP-1. *NEJM.* 2021;384:989-1002.
P-Sunyer et al. SCALE. *NEJM.* 2015;373:11-22.

Consider pharmacologic therapy for adults with overweight (BMI ≥27 kg/m^2) or obesity (BMI ≥30kg/m^2) with weight-related complications and after an inadequate response (< 5% weight loss) to lifestyle interventions.

Anti-obesity medications are more effective when combined with lifestyle modifications.

Recommendation	Strength of Recommendation Quality of Evidence
In adults with obesity or overweight with weight-related complications, the AGA suggests using ***semaglutide 2.4 mg*** with lifestyle interventions, compared with lifestyle interventions alone. *Given the magnitude of net benefit, semaglutide 2.4 mg may be prioritized over other approved AOMs for the long-term treatment of obesity for most patients.*	Conditional/Moderate
In adults with obesity or overweight with weight-related complications, the AGA suggests using **liraglutide 3.0 mg** with lifestyle interventions, compared with lifestyle interventions alone.	Conditional/Moderate

Grunvald E et al. *Gastroenterology.* 2022;163:1198-1225.

Common Side Effects

- May delay gastric emptying with adverse effects of nausea, constipation and vomiting. Gradual dose titration may help mitigate these adverse effects.
- Associated with an increased risk of pancreatitis and gallbladder disease.

Rapid weight loss increases risk of cholelithiasis and need for adjustment of other medications (DM and HTN etc.)

- Rapid weight loss: > 12% weight loss over 4 weeks or > 10% over 7 days.
- In the presence of GI side effects, recommend holding medication until symptoms resolve and consider re-starting at lower dose.
- In the absence of GI side effects, recommend decreasing the dose and close follow up.

Table 2: Comparative Doses of GLP-1 and dual GLP-1/ GIP receptor agonists (diabetes)

Medication	Dosing Frequency	Titration schedule	Comparative Doses *(Hgb A1c Reduction)*						
Liraglutide	Daily	1 week	0.6 mg	1.2 mg	1.8 mg				
Dulaglutide	Weekly	4 weeks		0.75 mg	1.5 mg	3 mg	4.5 mg		
Semaglutide SC	Weekly	4 weeks		0.25 mg	0.5 mg		1 mg	2 mg	
Semaglutide PO	Daily	4 weeks	3 mg	7 mg	14 mg				
Tirzepatide	Weekly	4 weeks			2.5 mg			5-7.5 mg	10-15 mg

Source: ADA Clin Diabetes 2023, ADA Clin Diabetes 2020, endocrinology expert opinion MGB (5/2024)

Table 3: Comparative Doses of GLP-1 and dual GLP-1/ GIP receptor agonists (obesity)

Medication	Dosing Frequency	Titration schedule	Comparative Doses *(Weight Loss)*							
Liraglutide	Daily	1 week	0.6 mg	1.2 mg	1.8 mg		2.4 mg	3 mg		
Dulaglutide	Weekly	4 weeks		0.75 mg	1.5 mg	3 mg	4.5 mg			
Semaglutide SC	Weekly	4 weeks		0.25 mg	0.5 mg		1 mg	1.7 mg	2.4 mg	
Tirzepatide	Weekly	4 weeks			2.5 mg			5 mg	7.5 mg	10-15 mg

Source: ADA Clin Diabetes 2023, expert opinion MGB (5/2024)

Prescribing recommendations

- Recommend against prescribing multiple lower strength injection device to make a higher dose due to insurance's quantity limit restrictions and limited supplies.
- Recommend against extended interval (i.e. giving every 2 weeks rather than every 1 week) or alternative intermediate dosing (i.e. giving smaller doses from injection) due to lack of robust evidence and concern for beyond use date expiration.
- For patients with type 2 diabetes on GLP-1 for cardiorenal protection, be aware that tirzepatide does not have proven benefits per current literature.

Dose conversion charts available based on comparative A1c and % weight loss reduction

Contraindications and Precautions

Avoid

- **Black Box Warning:** Personal/family history of medullary thyroid carcinoma (MTC) or multiple endocrine neoplasia type 2 (MEN-2)
- History of unprovoked pancreatitis
- History of severe gastroparesis
- History of suicidal attempts or active suicidal ideations
  - FDA determined that there is no clear relationship between GLP-1 use and suicidality. FDA will continue to examine this issue as a small risk cannot be definitively ruled out.
  - Providers should monitor for and advise patients using GLP-1 agents to report new or worsening depression, suicidal thoughts, or any unusual changes in mood or behavior.

Caution History of mild/moderate GERD, diabetic retinopathy

Saxenda. https://www.novo-pi.com/saxenda.pdf.
Zepbound. https://pi.lilly.com/us/zepbound-uspi.pdf.
Wegovy. https://www.novo-pi.com/wegovy.pdf.

Additional Considerations for GLP-1 Agonists

Concomitant T2DM medications

Other diabetic medications (especially insulin or sulfonylureas) may require dose titration.

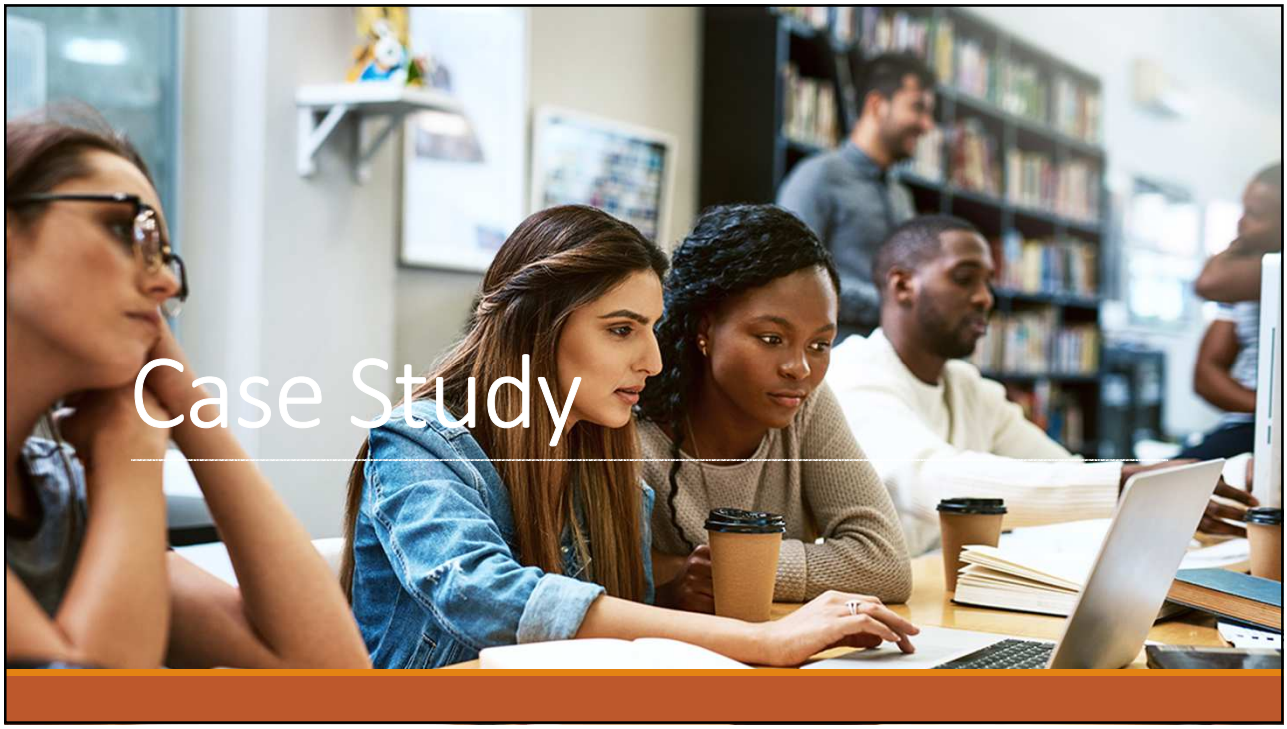
- Potential prandial insulin replacement (depending on insulin requirement).

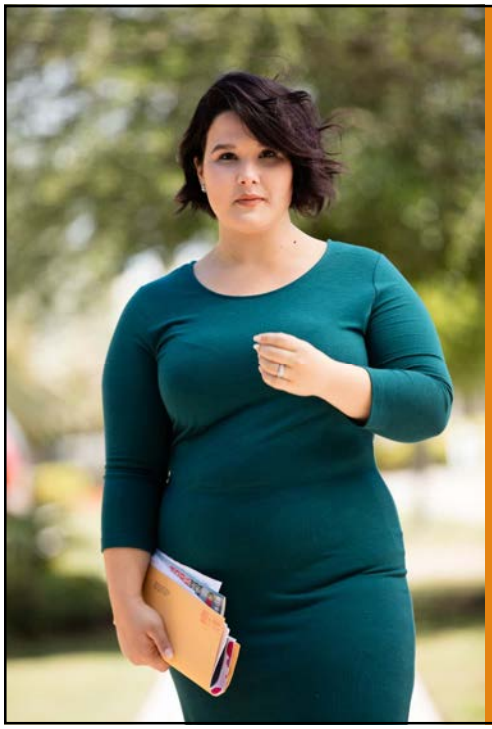
DPP4 inhibitors **should be stopped** when starting GLP-1 agonist.

Oral hormonal contraceptives

May result in decreased absorption of the oral hormonal contraceptive (OCP's).

Tirzepatide only (per package insert): *Patients should switch to non-oral contraceptive method or add a barrier method of contraception for 4 weeks after initiation and for 4 weeks after each dose escalation. Notify provider immediately if the patient becomes pregnant.*





54 yo postmenopausal woman with a past medical history significant for Class 2 obesity (BMI 36) and GERD. She has been admitted for 3 days after an episode of pancreatitis.

She is married and has 3 children. She has been an avid tennis player since college. She reports that while she has always been active and follows a healthy diet she has "struggled" with her weight for most of her adult life.

She was started on semaglutide 6 months ago and has lost over 40 pounds. Three months prior to her current admission she reports she was admitted overnight to an outside hospital for "abdominal pain". Chart review reveals she was admitted for pancreatitis.

As you discussed with her the risk of subsequent episodes of pancreatitis with continued use of a GLP-1 agonist she tells you "this medications have changed my life and I haven't reached my goal BMI, do I really have to stop taking it?"

How would you counsel this patients on ways to maintain her health and wellbeing?

Take Home Points

BMI is significantly correlated with the amount of fat mass in the general population but loses predictability when applied on the individual level.

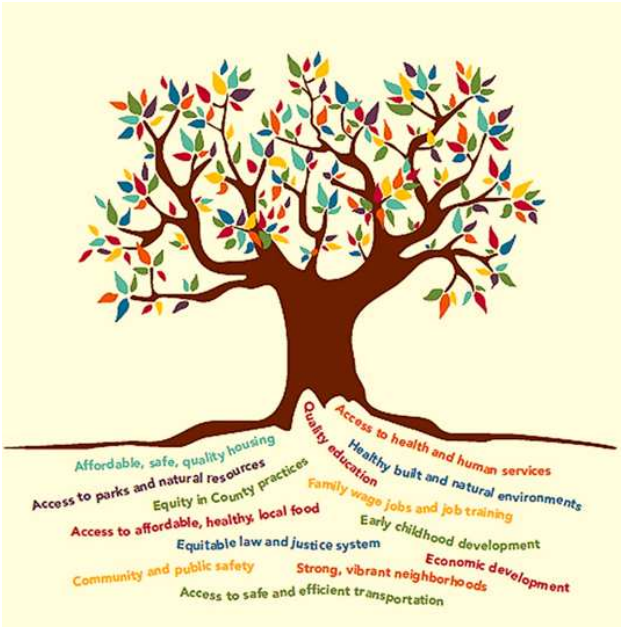
Relative body shape and composition heterogeneity across race and ethnic groups, sexes, genders and age-span is essential to consider when applying BMI as a measure of adiposity.

Growing evidence indicates that weight shaming does *not* motivate weight loss, improve health behavior, or increase lifespan.

Use culturally informed educational and counseling materials pertaining to abnormal eating behaviors, dieting and weight-restrictive behaviors

Assess patient's relevant lifestyle behavior, beliefs and motivation with attention to the life stage, social context, health-related social needs and other factors that

AMA: Use of BMI alone is an imperfect clinical measure | American Medical Association (ama-assn.org)


Affordable, safe, quality housing
Access to parks and natural resources
Equity in County practices
Access to affordable, healthy, local food
Equitable law and justice system
Community and public safety
Access to safe and efficient transportation
Quality education
Family wage jobs and job training
Strong, vibrant neighborhoods
Access to health and human services
Healthy built and natural environments
Early childhood development
Economic development

Thank You