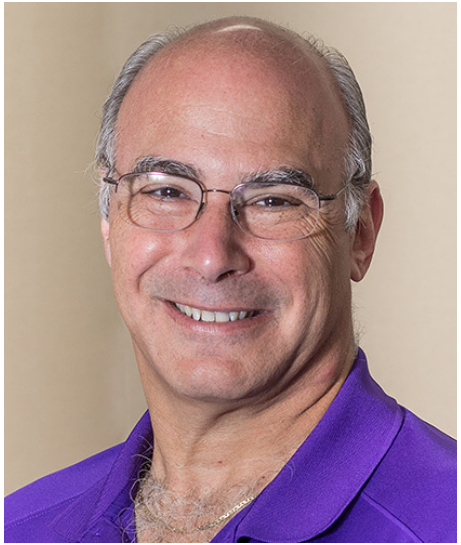
2023 STFM CONFERENCE ON MEDICAL STUDENT EDUCATION

New Orleans

JANUARY 26-29, 2023

#MSE23



Scott Fields Lecture

Scott Fields, MD, MHA

2023 STFM CONFERENCE ON MEDICAL STUDENT EDUCATION

"The Weight of Bias: Anti-Fat Bias, Health, and Medical Education"

Lisa Erlanger, MD
University of Washington

NEW ORLEANS, LA
JANUARY 26-29, 2023 • MARRIOTT NEW ORLEANS HOTEL

The Weight of Bias:

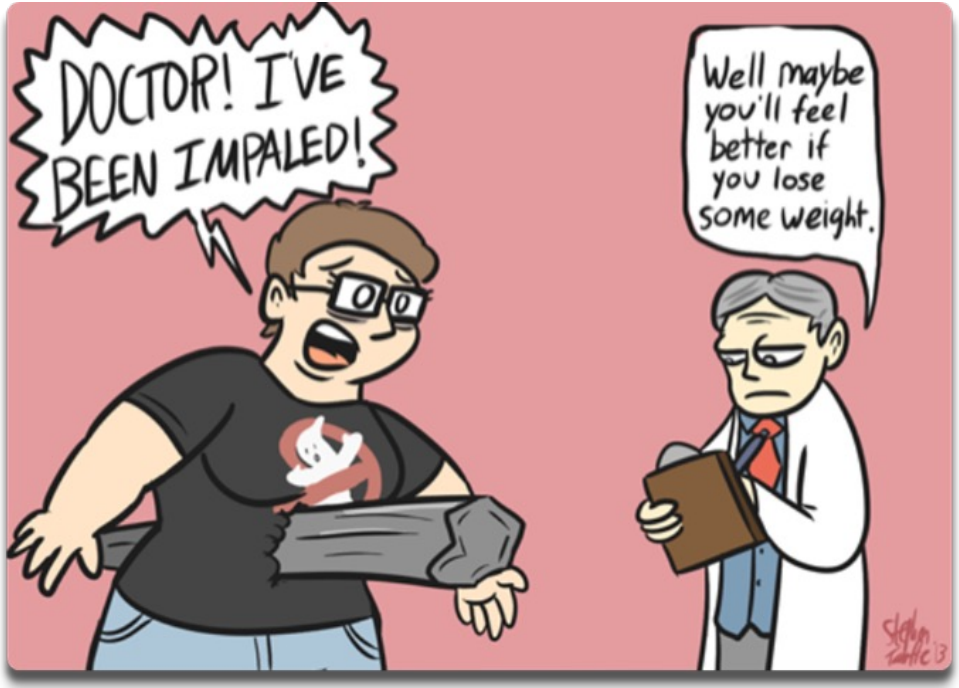
Anti-Fat Bias, Health, and Medical Education

Lisa Erlanger, MD

University of Washington School of Medicine

Seattle is the unceded land of the dkhw'duw'absh,(Duwamish), Puyallup, Muckleshoot, Suquamish, Tulalip, and Coast Salish peoples .

Disclosures: None



Objectives

- Recognize effects of anti-fat bias on patients' health
- Analyze weight-centric practice and research through an anti-bias lens
- Implement an anti-bias framework for teaching and practice

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Anti-Fat Bias:

"The attitudes, behaviors, and social systems that specifically ***marginalize, exclude, underserve…*** *{people living in} fat bodies."*

-Aubrey Gordon,

Author of What We Don't Talk About When We Talk About Fat

Anti-Fat Bias

Dieting is a treatment
That doesn't work
For a disease
That doesn't exist

-Aubrey Gordon

Weight Stigma

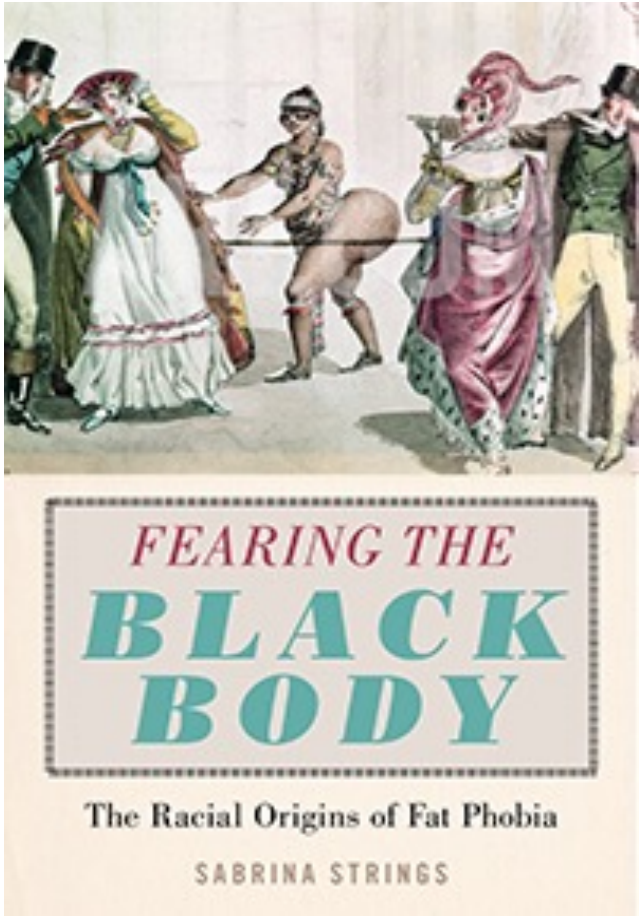
Diet Culture

"The conflation of obesity with racialized and colonized communities is part of a long tradition of marking marginalized populations as diseased"

McPhail D, Orsini M. Medicine and society: Fat acceptance as social justice. CMAJ. 2021

Social Justice and Racism in the Body Positive Movement: Gloria Lucas on Food Psych

https://www.taylorwolfram.com/body-liberation-anti-racist/



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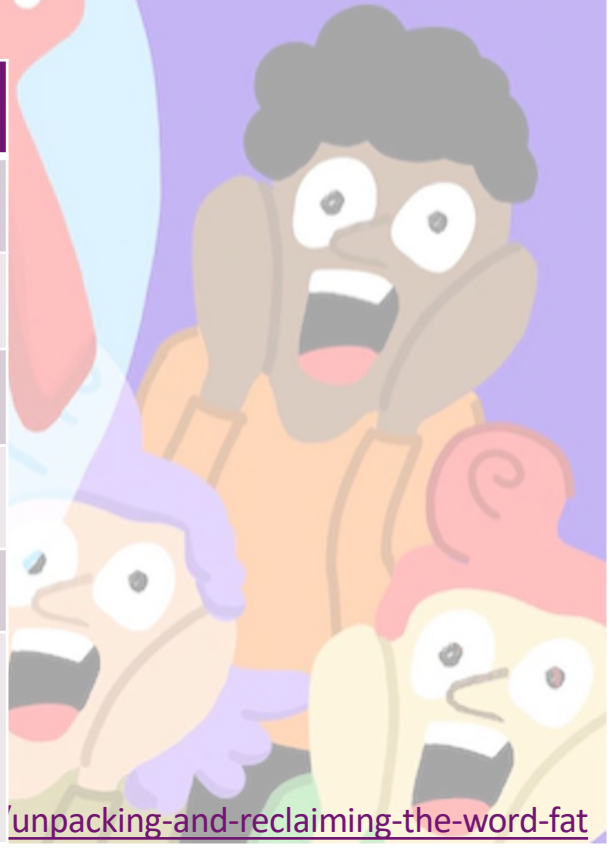
A Word About Words

Stigmatizing	Preferred
Morbidly obese	Higher weight
Obese	Fat
Healthy/Unealthy weight	Larger bodied
Normal, ideal weight	Thin bodied, thin privilege
Overweight/Underweight	"Overweight/obese according to current BMI standards"



'unpacking-and-reclaiming-the-word-fat

Victor, 57, fell yesterday and has knee pain

- Last seen 5 years ago
- Last A1C in 2017 was 6.4
- Low mood, energy, poor sleep
- "emotional eating"
- BMI 40
- BP 150/100

“I know I need to lose this weight,

I have young kids and I don’t want to die."

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Victor, 57: Fell yesterday and has knee pain. BMI 40

- How do you feel reading this case?
- What assumptions have we already made?
- Will Victor feel welcome in your office?

How unbiased are the sources of knowledge you'll rely on for assessment and treatment decisions?

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Recognize Effects of Anti-Fat Bias on Patients' Health

Anti-Fat Bias in Society

- Bullying
- Discrimination in hiring, pay, education, housing, legal system
- Downward socioeconomic pressure
- Social isolation
- Poorer healthcare, subjective and objective health, health seeking
- Increased psychophysiologic stress

In the Health and Retirment study (n=>13,000), weight-based discrimination predicted +60% mortality, independent of BMI

Enacted Bias **Stereotype Threat**

Physiologic stress reactivity

↓

Cardiovascular and HPA system activation

↓ ↓

Poorer health Weight gain

"We have more and deeper crevices. There can be shame and stigma buried in these places.

[Doctors] need to know that there is almost always a history of medical trauma there."

Rina Jurceka in Caring for Our Fat Bodies

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Anti-Fat Bias in Medical Students

- 74% implicit, 67% explicit bias on Implicit Attitudes Test
- Increased bias with lower BMI, male, non-Black
- 89% think obesity is a disease
- 88% think obesity is behavioral , 74% caused by ignorance 28% think obese people are lazy

Perception that negative attitudes are normative or that faculty role model discrimination correlate with reduced patient centered behaviors

Victor- how might bias affect his presentation?

- Avoidance of care
- Elevated blood pressure
- Focus on weight
- Increased A1C surveillance
- Covid issues
- “Emotional Eating”

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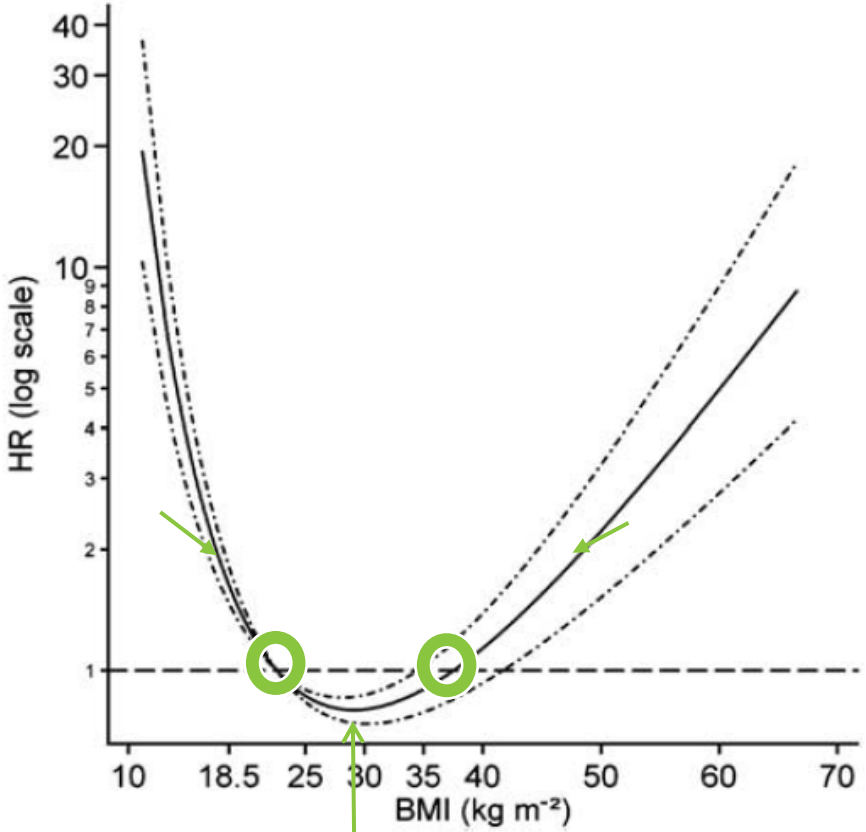
Analyze weight-centric practice and research through an anti-bias lens

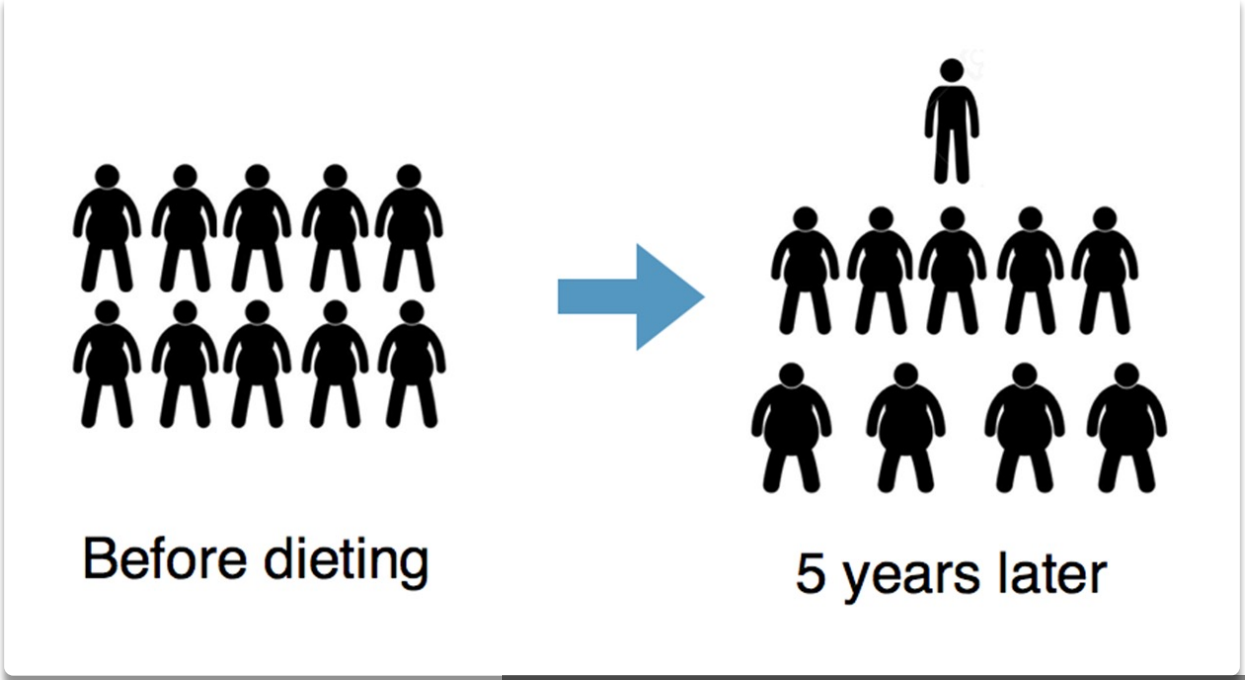
The "Obesity Paradox"

Relative Risk of Death by BMI
Inter J of Obesity 35:838-851, 2011



- K.M. Flegal, B.I. Graubard, D.F. Williamson, M.H. Gail, Excess deaths associated with underweight, overweight, and obesity JAMA., 293 (15) (2005), pp. 1861-1867, 10.1001/jama.293.15.1861
- Flegal KM, Kit BK, Orpana H, Graubard BI. Association of all-cause mortality with overweight and obesity using BMI categories: a systematic review and meta-analysis. *JAMA*. 2013
- Heymsfield, Does BMI adequately convey a personal mortality risk, JAMA 2013;309(1) 87-88
- Flegal, et al., Health risks of obesity, Haima and lazar, Science 23 Aug 2013

Weight Gain is a More Likely Outcome of Dieting Than Weight Loss



Mann, et al. 2007. *Am Psychol,* Fildes et al. 2015. *Am. J. Public Health*

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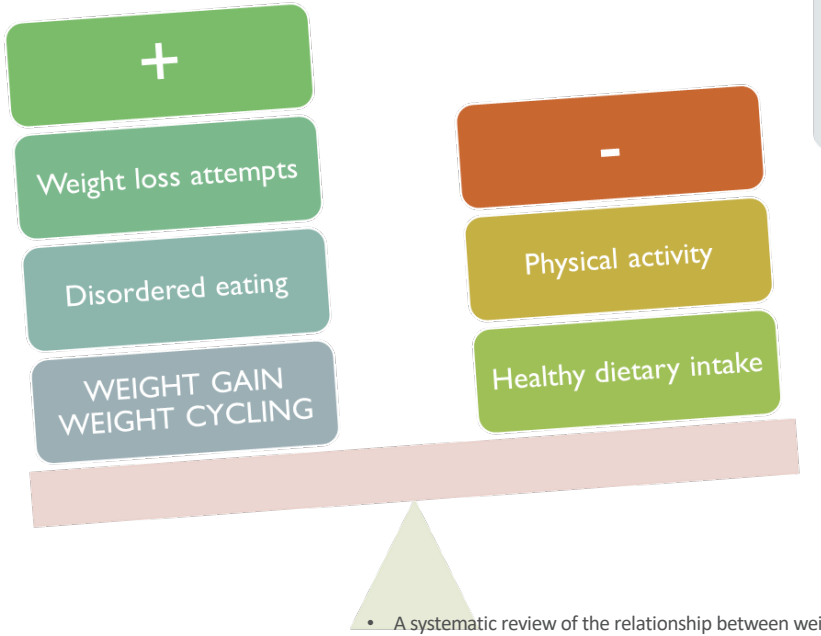
Perceived overweight correlated with:



Independent of BMI, age, gender

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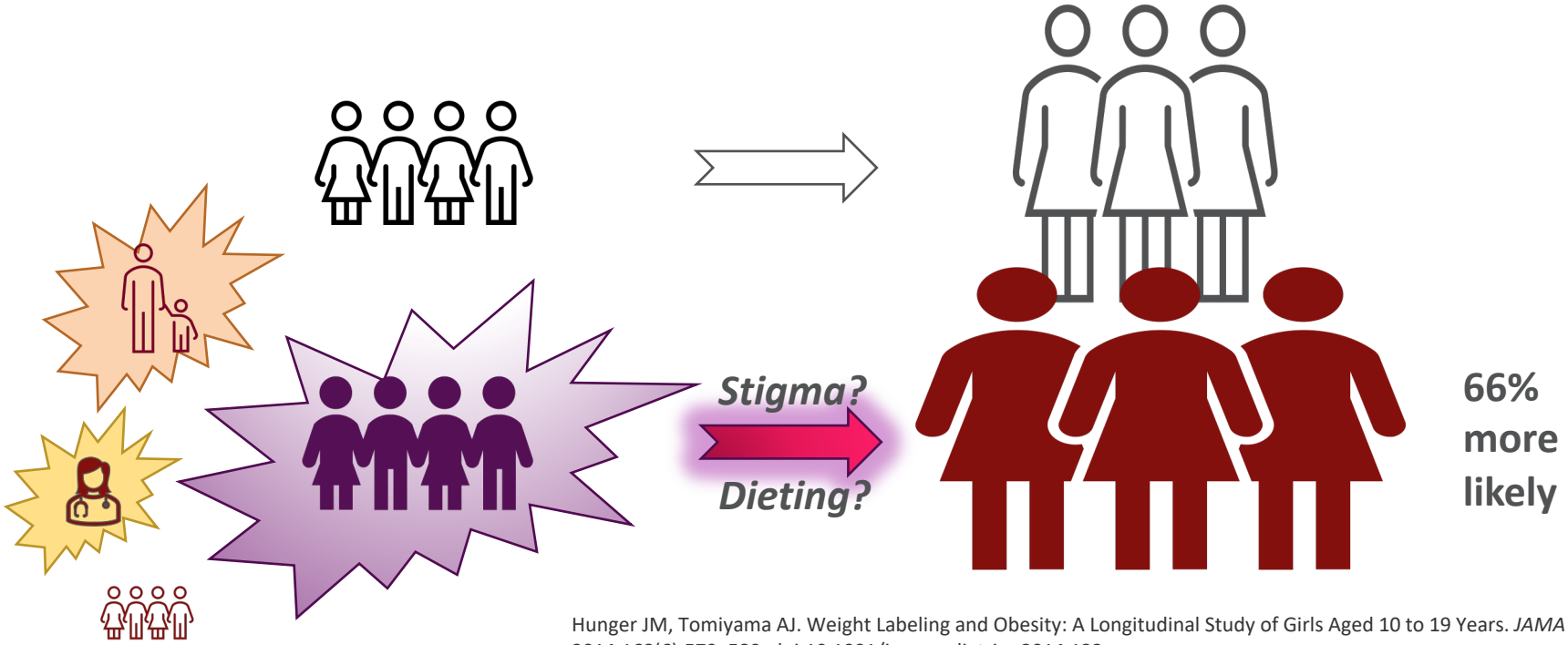
- A systematic review of the relationship between weight status perceptions and weight loss attempts, strategies, behaviou outcomes. Haynes, et al.Obes Rev. 2018 Mar; 19(3): 347–363
- Robinson, E. Et al. Perceived weight status and risk of weight gain across life in US and UK adults. Nature. 2015.

Effect of Weight Labeling on Adult Size



Hunger JM, Tomiyama AJ. Weight Labeling and Obesity: A Longitudinal Study of Girls Aged 10 to 19 Years. *JAMA Pediatr.* 2014;168(6):579–580. doi:10.1001/jamapediatrics.2014.122

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Does Intentional Weight Loss Improve Health?

Weight Cycling ("yo-yo dieting")Associated with:

- Cardiovascular Disease
- Hypertension
- Fat mass vs Lean Mass
- Cardiovascular Mortality
- All-Cause Mortality[1,2]

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[1]Zou et al 2019, [2]Oh et al 2019 [3]Harrington et al 2009

Risks of undernourishment in larger bodied patients

- Hypothalamic suppression
- POTS/tachy brady
- Hypoglycemia
- Electrolyte deficiencies, anemia
- GI distress
- "Bingeing"
- Compulsive exercise

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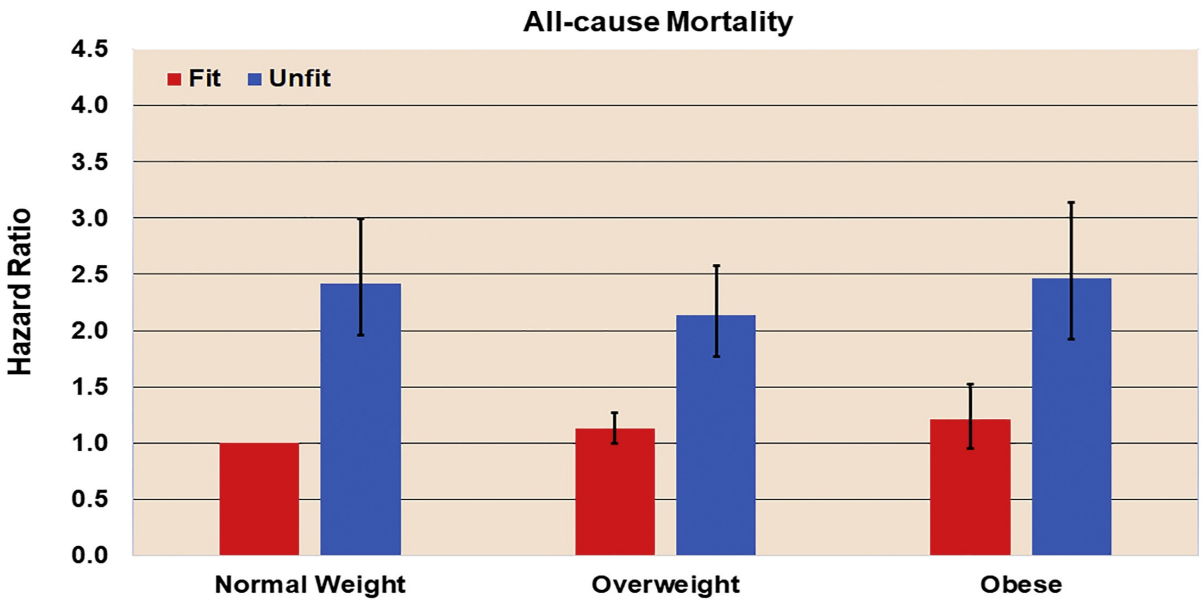
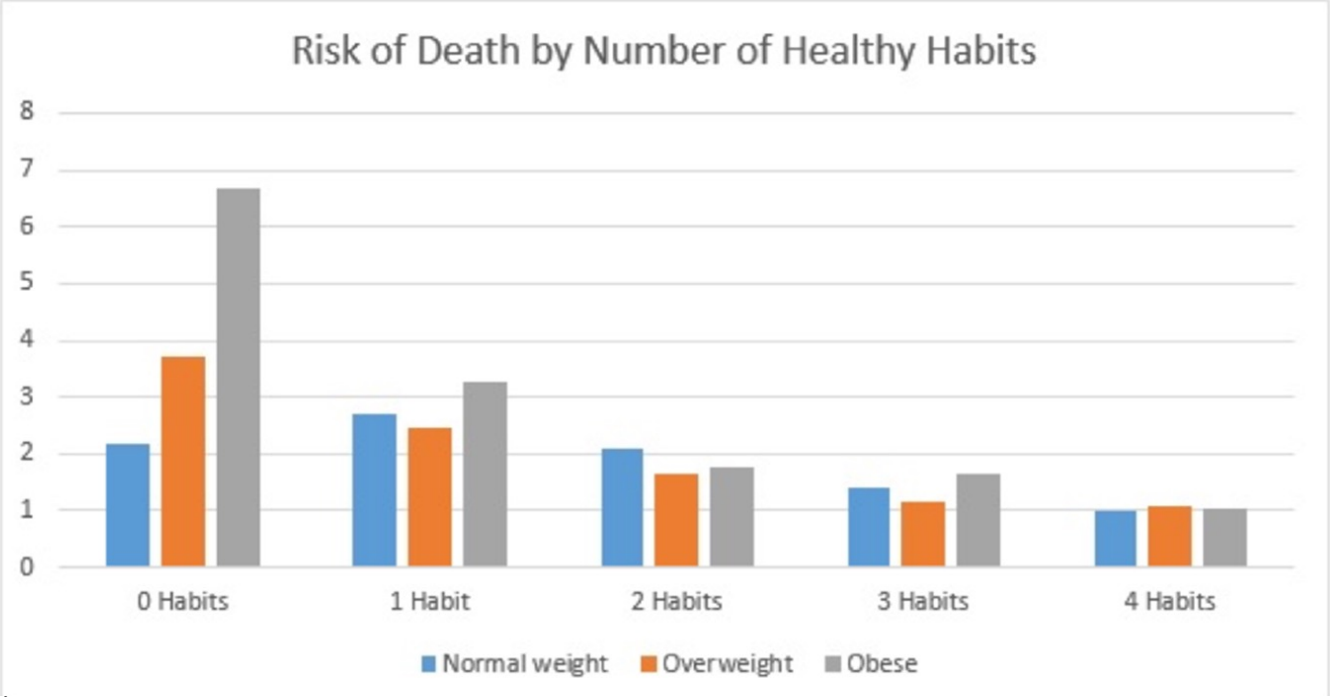
Weight Loss Vs. Fitness for Reducing Health Risks



Glenn A. Gaesser, Siddhartha S. Angadi, Obesity treatment: Weight loss versus increasing fitness and physical activity for reducing health risks, IScience 24(10),2021

Healthy Lifestyle Habits and Mortality in "Overweight" and "Obese" Individuals

Matheson, King, Everett. k J Am Board Fam Med, 2012



Habits

- Fruits and Veggies
- Regular physical activity
- Not smoking
- Alcohol in moderation

Slide b

Victor- how might bias affect what we think we know?

- BMI 40
- Weight loss vs other interventions
- Past weight cycling? Weight stigma?
- Adequate nourishment?

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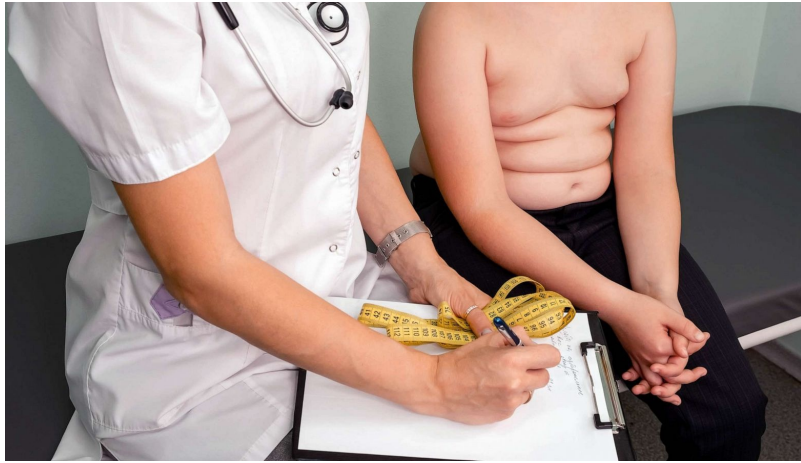
Analyze Research With an Anti-Bias Lens

- D

New AAP guidance on childhood obesity urges medication and surgery

Health Jan 9, 2023 11:42 AM EST



Referral for:

- Intense lifestyle intervention age 2
- Medications for kids as young as 12
- Surgery for those as young as 13

See one response, Ragen Chastain, Weight and Health Newsletter

Look AHEAD Trial Halted After Finding No CV Benefits of Intensive Lifestyle Intervention in Diabetes

Oct 15, 2012

ACC News Story

Volunteers had to pass a maximum exercise test to participate in the study

Share via: Print

…1200–1500 Kcal/day.

The Look AHEAD trial h… vascular benefit, acco… to a statement rele… of Health (NIH), the funders of the trial.

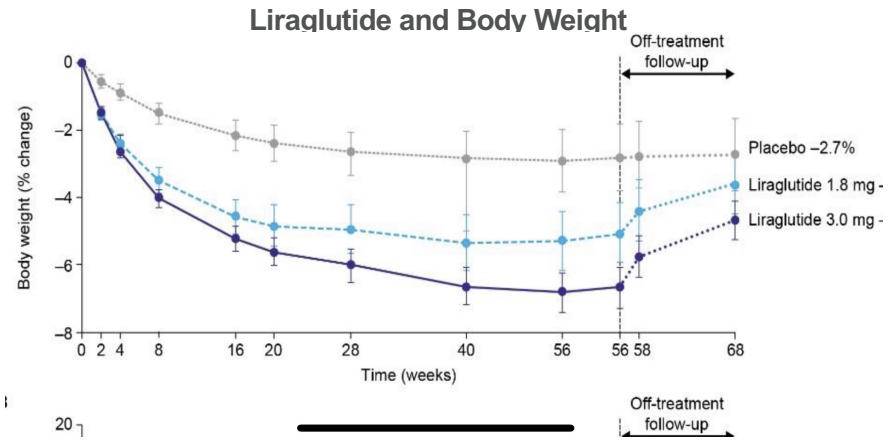
"Despite the overall lack of CVD risk reduction, ILI remains important for care of patients with T2DM, particularly when accompanied by medication management."

Despite no benefit on the primary outcome, intensive lifestyle intervention resulted in significant weight loss and reduced the prevalence of cardiovascular risk factors; however, this benefit became somewhat attenuated between 1 and 4 years.

Pi-Sunyer, Xavier. "The Look AHEAD Trial: A Review and Discussion Of Its Outcomes." *Current nutrition reports* vol. 3,4 (2014): 387-391. doi:10.1007/s13668-014-0099-x

GLP-1s for Weight Loss

- 2/3 vs 1/3 of patients lose weight when combined with diet and exercise
  - Most within 20 weeks, plateau at 9 months
    - Rapid weight gain if stopped
      - Funded by Novo Nordisk
    - No longterm data on improved morbidity and mortality over reasonable controls.
- Weight loss by other methods does not improve health long-term for most people



Davies et al, JAMA 2015

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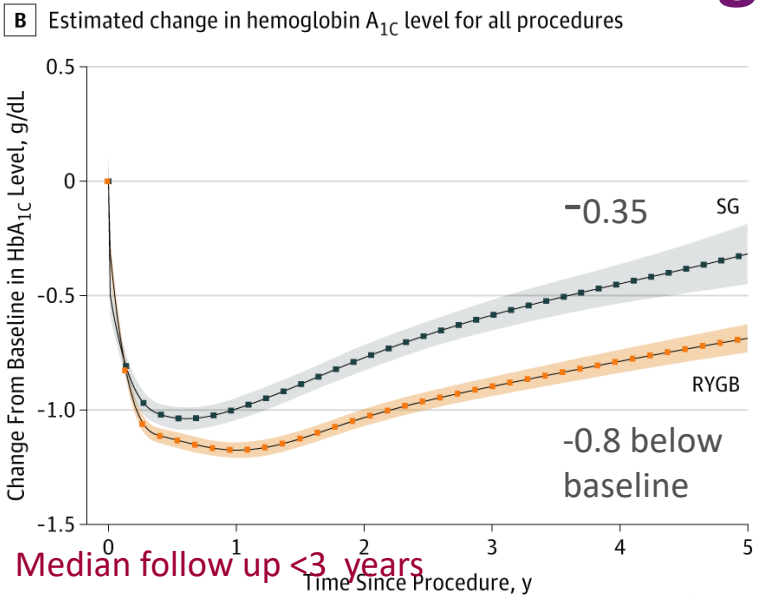
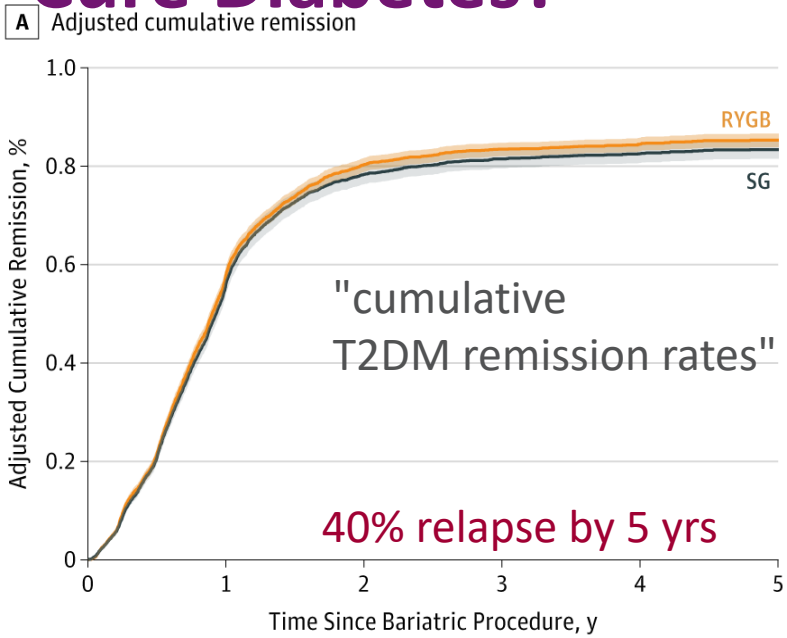
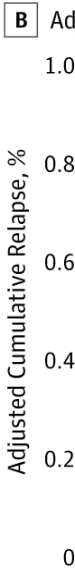
Does Bariatric Surgery Cure Diabetes?







Median follow up <3 years
Mean preoperative A1C 7.2, 19% not on meds
Proportion >=8.0
- RYGB 24.6% to 6.4% at 1 yr, 16% 5 yrs
- SG 17% to 8.3 to 22%

From: **Comparing the 5-Year Diabetes Outcomes of Sleeve Gastrectomy and Gastric Bypass: The National Patient-Centered Clinical Research Network (PCORNet) Bariatric Study**

JAMA Surg. 2020;155(5):e200087. doi:10.1001/jamasurg.2020.0087

Evaluating Weight Loss Intervention Studies

Who funded the study? Who benefits?

Is the study appropriately controlled?

Is the intervention nutritionally and culturally appropriate?

Does the study measure risks of weight loss interventions?

Does the study evaluate long-term (5+yrs) outcomes?

Does the study assume those lost to follow-up maintained the same weight and had no long-term negative effects?

Was the data interpreted and reported correctly? Does it lead to the conclusions?

Would the conclusion follow from the data if we didn't assume weight loss is good, weight loss is the key variable, and dieting is at least a neutral intervention?

Implement an Anti-Bias Framework for Teaching and Practice

Anti-Bias Provider

Recognizes identity as a key determinant of health, healthcare, and science

Commits to reducing harm through self-awareness, critical analysis and repair

Empowers patients and communities

Confronts barriers to healthcare justice and equity

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Empowering Patients: Health at Every Size ® / Weight-Inclusive Care

Supports patients in finding **authentic motivation** and **sustainable methods** of caring for themselves, **regardless** of the weight (or specific health) outcome

Fat Body Care (links to document)

- Toilet, Shower, menstrual hygiene
- Skin Care, foot care
- Undergarments
- Sex, relationships, community
- Violence, trauma
- Chairs and beds
- Mobility
- Medication information
- Exercise options, exercise and weather wear

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Evidence for weight inclusive care

- Lower blood pressure
- More favorable lipids
- Increased exercise
- Less disordered eating
- Improved mood, self-esteem, body image
- Better adherence
- No weight cycling
- Greater resilience to weight stigma

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Tylka, et al The Weight Inclusive Vs Weight Normative Approach to Health. J Obesity 2014
Bacon and Aphramor. Weight Science: Evaluating the Evidence for a Paradigm Shift. Nutr J 2011

Victor, student presentation

57-year-old morbidly obese man with pre-diabetes presents with weight gain, fatigue and knee pain, requesting assistance in losing weight. He hasn't been in for 5 years.

He was hard to engage. BMI 40, BP 150/100.I had difficulty examining his knee, I think he had a skin infection- there was an odor.

Plan:

- Check A1C, lipids, Chem-7, TSH, sleep study
- GLP-1 for weight and glucose, ACE for blood pressure
- Low-carb diet, start exercising with a goal of 150 min/wk

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Victor, 57, fell yesterday, knee pain

- I'm trying to unlearn bias, so let's not include BMI or "obesity" in case presentations
- How would we care for this patient if they were in a smaller body?
- Could undernourishment be playing a role here?
- I'm learning that some of the things we think we know about weight aren't true. Let's re-read that paper
- How might bias be affecting Victor's presentation or assessment?
- How would it feel to set weight aside for now, and focus on the symptoms that are bothering you the most?

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Anti-Bias Practice- DO NOT

- Start with a weight. Consider deferring BP
- Include BMI/O diagnoses on problem lists or ID/CC
- Make assumptions about diet/exercise/health based on weight
- Delay appropriate treatment for trial of weight loss
- Praise weight loss or conflate weight with health
- Choose/deny medications for effect on weight
- Take time from other treatable issues to discuss weight
- Offer unproven diets or unrealistic weight or health promises

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Anti-Bias Practice- DO

- State intentions, apologize
- Assess for effects of bias in presentation
- Address the chief complaint
- Assess nourishment
- Provide evidence-based, weight inclusive care, including prevention "what would we do for a smaller person?"
- Get consent before talking about lifestyle, weight, nutrition, movement
- Seek out diverse fat voices, mentors, training

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Victor is a 57 year old man who fell and has acute knee pain.

He has a history of weight stigma in past care, and has been avoiding coming in since he was told to lose weight for prediabetes. He has gained weight with recent stresses that include food insecurity and depression.

On exam, His blood pressure was elevated, but it was taken right after his weight, with a cuff that was too small. He warmed up when I apologized for not having the right equipment and for the bias he'd experienced, and his recent stress. I'll need help examining his knee, and I'm concerned about rashes in his intertigenous areas.

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Victor, A/P

Patient in acute pain from knee trauma who is also in a large body and has been avoiding care because of past weight stigma.

- We need to get a good exam of his knee. Do you have any weight-inclusive PTs or orthopedists?
- We talked a little bit about weight-inclusive care. I suggested we **set weight aside for now**, address his knee pain, do labs and BP monitoring when he's ready, and connect with SW about food resources and possible depression.
- I'll give him our body care handout.
- Let's ask him when he'd like to follow up.

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You and anti-bias care for larger patients

- The connections between weight and health are largely mediated by anti-fat bias. Weight as SDoH.
- Weight loss by any means is not safely sustainable for the overwhelming majority of people
- There are many ways to improve health without changing body size, including by fighting anti-fat bias
- Anti-bias care requires critical analysis of our sources of knowledge, and advocacy for patients and communities

Join Us and Learn More!

- Association for Size Diversity and Health
- National Association to Advance Fat Acceptance
- Medical Students for Size Inclusivity
- Health at Every Size for Physicians Facebook Group

Thank You

Resources follow in the slide set

Resources

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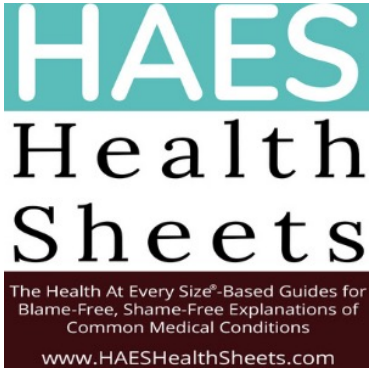
Seek out diverse fat voices

- The Body is Not an Apology Sonya Renee Taylor
- Decolonizing Wellness A QTBIPOC Guide, Dalia Kinsey
- You Just Need to Lose Weight and 19 Other Myths about Fat People, Aubrey Gordon
- Belly of the Beast, the Politics of Anti-Fatness as Anti-Blackness, Da'shaun Harrison
- Rachel Wiley, Button Poetry
- Hunger, A Memoir of (My) Body, Roxane Gay
- Nalgona Positivity Pride, Gloria Lucas
- Heavy, An American Memoir, Kiese Laymon



Health At Every Size®-Based Guides
for Blame-Free, Shame-Free Explanations of Common Medical Conditions
(ASDAH- Association for Size Diversity and Health) https://haeshealthsheets.com/

Meghan Cichy RD Gentle Nutrition Handouts

The Fat Doctor #NoWeigh and Webinars

Training:
Center for Body Trust https://centerforbodytrust.com/offerings/#offerings-for-professionals

Blog:
Weight and Healthcare Newsletter by Regan Chastain

Books:
Reclaiming Body Trust, A Path to Healing and Liberation by Dana Sturtevant and Hilary Kinavey
Anti-Diet Christy Harrison
Fearing the Black Body, Sabrina Strings

Podcasts:
"Maintenance Phase" Podcast maintenancephase.com
The Fat Doctor Podcast Dr Asher Larmie www.fatdoctor.co.uk
"Unpacking Weight Science"- Fiona Willer Unpackingweightscience.Com
Christy Harrison: "Food, Psych" podcast www.christyharrison.com

Selected References

Michael Hobbs, Everything You Know About Obesity Is Wrong, Huffington Post, 2018

Tomiyama et al. How and Why Weight Stigma Drives the Obesity 'Epidemic' and Harms Health. BMC Medicine 2018

Anorexia Knows No Body Type, Seattle Times, 2018

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Hunger, Smith, Tomiyama. An Evidence-Based Rationale for Adopting Weight Inclusive Health Policy. Social Issues and Policy Review 14(1) 2020

Gaesser and Angadi, Obesity treatment: Weight loss versus increasing fitness and physical activity for reducing health risks, IScience 2021

Tylka, et al The Weight Inclusive Vs Weight Normative Approach to Health. J Obesity 2104

Bacon and Aphramor. Weight Science: Evaluating the Evidence for a Paradigm Shift. Nutr J 2011

Consider Internalized Weight Stigma:

"The Fat Joke"

Implicit Attitudes Test on Obesity

Updated 2/2022

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