

Breaking through Public Presumptions and Myths about Obesity

Ted Kyle, RPh, MBA

Four Issues for Today

- Pervasive bias
- Myths, presumptions, and facts
- Correlations and causality
- Picturing obesity

Critical Thinking About Nutrition, Obesity, and Health

Perspective on bias

What Is This Bias of Which I Speak?

Bias is an inclination or outlook to present or hold a **partial perspective**, often accompanied by a **refusal to consider** the possible merits of **alternative points of view**. Biases are learned implicitly within cultural contexts. People may develop biases toward or **against** an **individual**, an ethnic **group**, a nation, a religion, a social class, a political party, theoretical **paradigms** and **ideologies** within academic domains, or a species.

– Adapted from
Psychology: Contemporary Perspectives
Paul Okami



Two Kinds of Bias Are Pervasive in Obesity

- Intellectual bias favoring personal convictions
- Weight bias directed at people with obesity



Critical Thinking About Nutrition, Obesity, and Health

How does bias infiltrate media, research & policy?

The Impact of Bias Starts with Research & Scientific Literature

- Observational studies
- Short-term endpoints
- Surrogate endpoints
- Publication bias
- Repetitive studies build a bias of familiarity

“Many conjectures commonly advanced as recommendations to reduce weight gain or promote weight loss – ‘eat breakfast every day,’ ‘eat more fruits and vegetables’, ‘eat more meals with family members’, ‘reduce fast food availability’ ‘eliminate vending machines from schools,’ etc. – could be tested and we should challenge ourselves to do so more often.”

Casazza and Allison:
Stagnation in the clinical, community
and public health domain of obesity

Myths and Presumptions Presented as Facts

Myths

- Small energy changes add up to big weight loss
- Realistic goals yield better weight outcomes
- Slow weight loss is best
- Readiness to change matters
- PE prevents childhood obesity
- Breastfeeding prevents obesity
- Sex burns 100-300 calories

Presumptions

- Breakfast prevents weight gain
- Early exercise and eating habits shape weight for life
- Eating fruits and veggies will reduce weight or prevent gain
- Snacking causes obesity
- Sidewalks and parks prevent obesity

Myths and Presumptions Presented as Facts

Myths

- Small energy changes add up to big weight loss
- Realistic goals yield better weight outcomes
- Slow weight loss is best
- Readiness to change matters
- PE prevents childhood obesity
- Breastfeeding prevents obesity
- Sex burns 100-300 calories
- *Breakfast prevents weight gain*

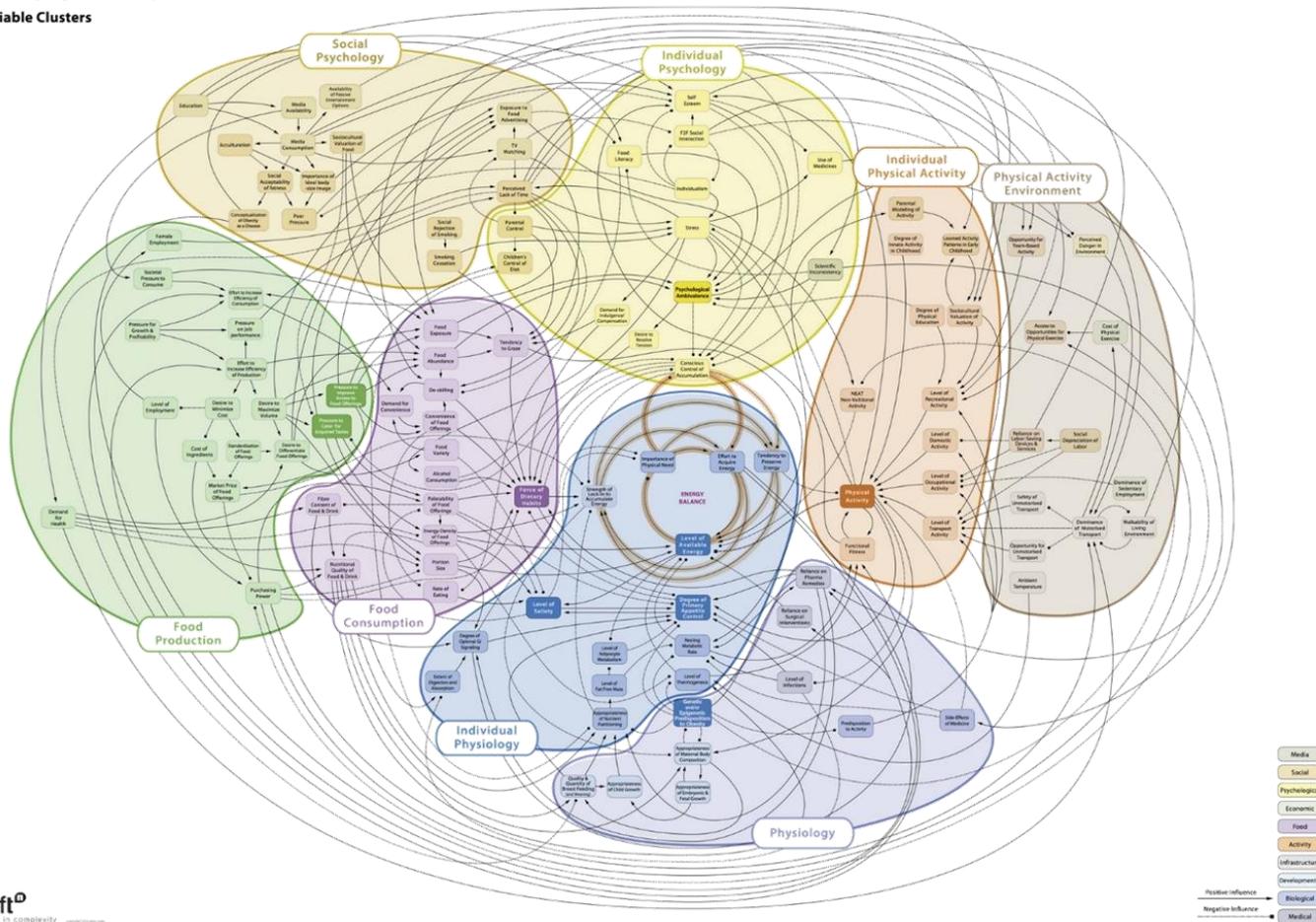
Presumptions

- ~~Breakfast prevents weight gain~~
- Early exercise and eating habits shape weight for life
- Eating fruits and veggies will reduce weight or prevent gain
- Snacking causes obesity
- Sidewalks and parks prevent obesity

Presumptions

Triumph Over Scientific Complexity

Obesity System Map
Variable Clusters



shift^o
clarity in complexity

Myths and Presumptions Become the Basis for Policy Decisions

- Low-fat dietary recommendations
- Investment in breastfeeding programs to prevent obesity
- Investments to eradicate food deserts
- Restaurant menu labeling

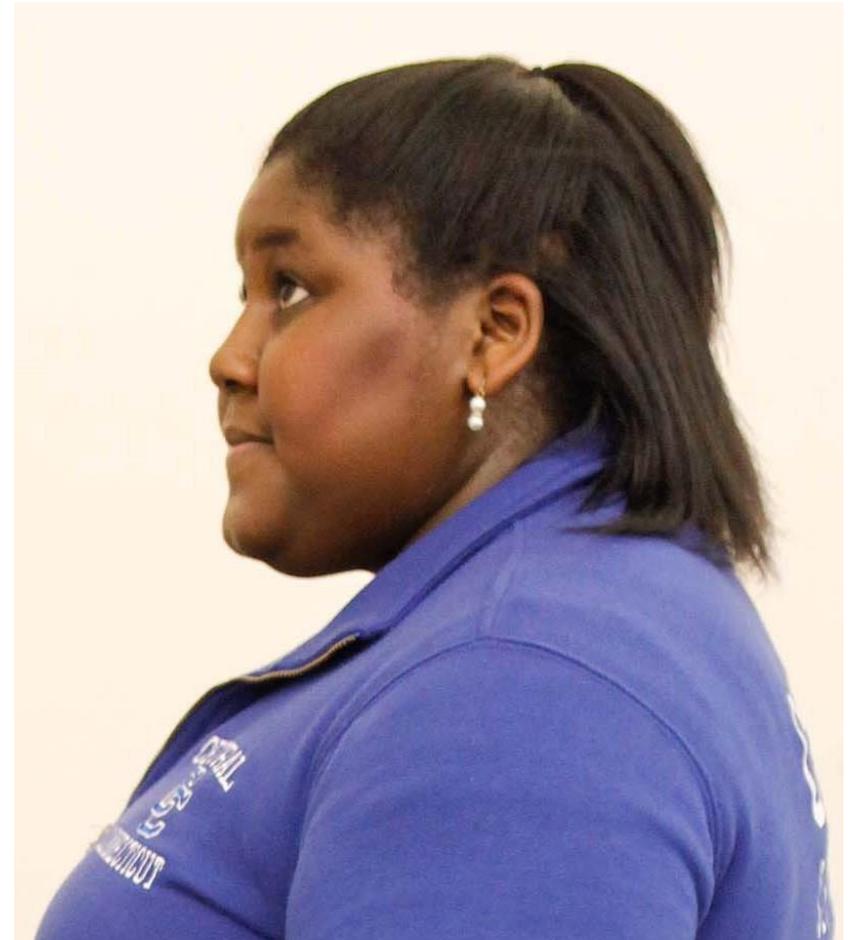
Critical Thinking About Nutrition, Obesity, and Health

Bias directed at people with obesity

Weight Bias Flows from Common Assumptions About People with Obesity



Untitled, photograph by Boohoomian / flickr

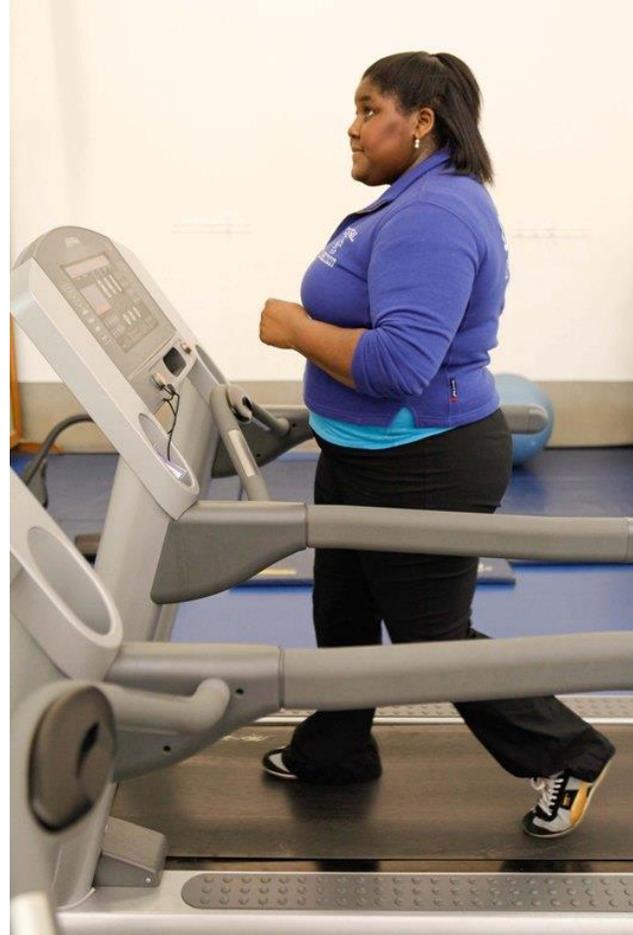


Photograph courtesy of the UCONN Rudd Center

Weight Bias Flows from Common Assumptions About People with Obesity



Untitled, photograph by Boohoomian / flickr



Photograph courtesy of the UCONN Rudd Center

Health Professionals Harbor Bias Against Patients with Obesity

- Non-compliant
- Lazy
- Lack self-control
- Awkward
- Weak-willed
- Sloppy
- Unsuccessful
- Unintelligent
- Dishonest



Historical Bias About Obesity

The best place to start is by simply telling the patient the truth.

“Sir or Madam, it’s not OK to be obese. Obesity is bad. You are overweight because you eat too much. You also need to exercise more. Your obesity cannot be blamed on the fast food or carbonated beverage industry or on anyone or anything else.

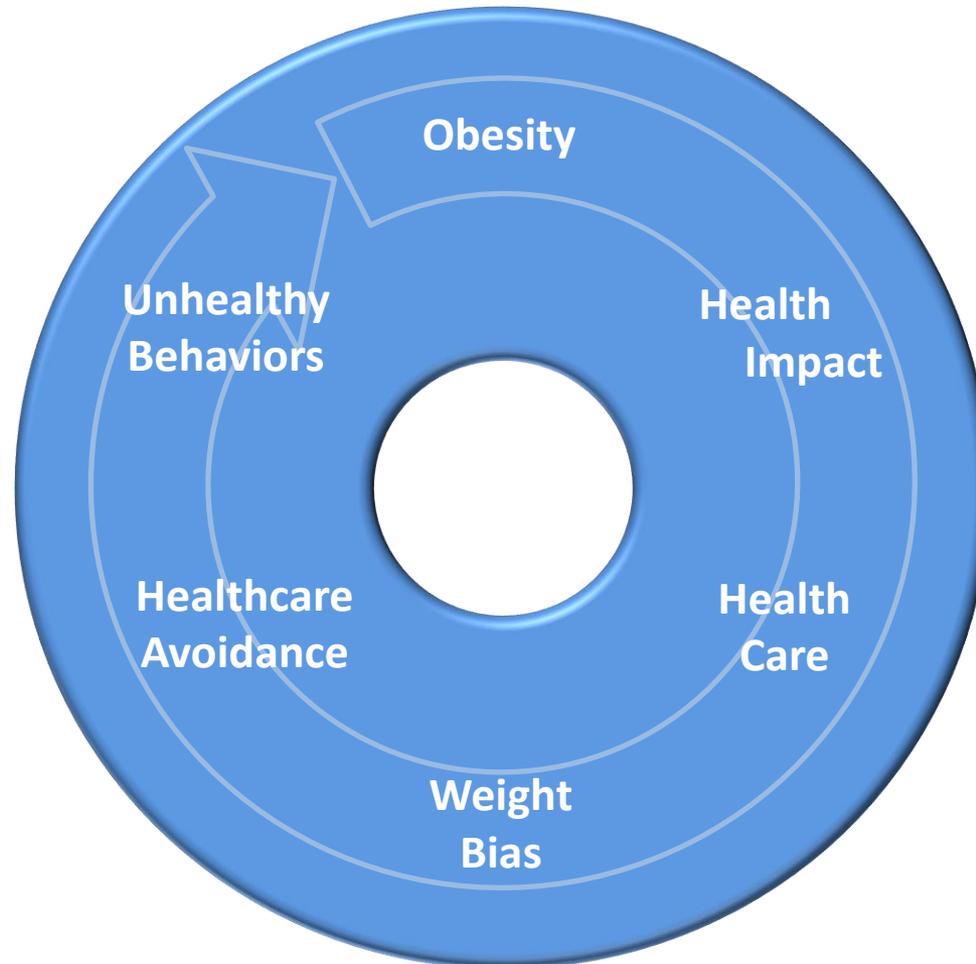
*You weigh too much because you eat too much.
Your health and your weight are your responsibility.”*

Robert Doroghazi, MD

AJM, Mar 2015

Weight Bias

Compounds the Harm of Obesity



Pictures Tell a Story More Powerfully Than Words

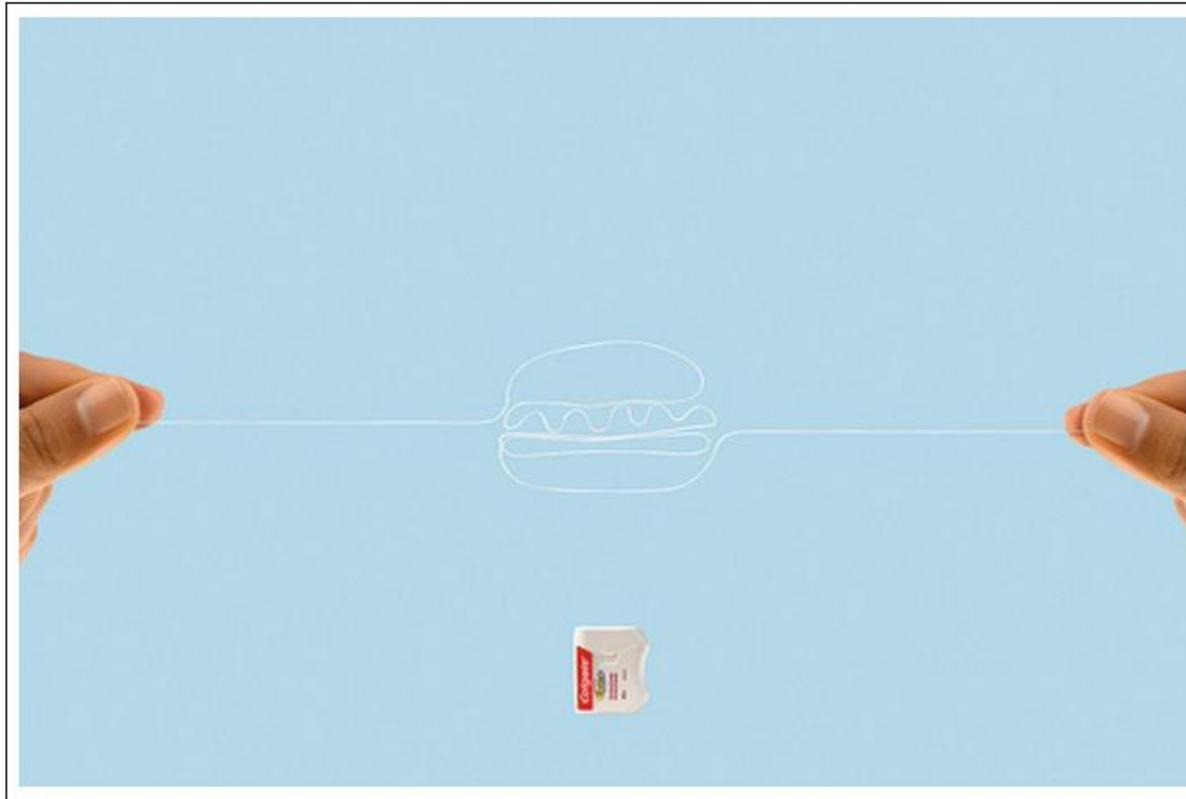


Pictures Tell a Story More Powerfully Than Words



Source: <http://www.obesityaction.org/oac-image-gallery/>

Correlations Provide Clues But Not Proof of Cause & Effect



To Prevent Obesity, Just Be Sure to Floss

Correlations with Unproven Causality

- High fat diets and obesity
- Food deserts and obesity
- Potatoes and diabetes

Low-Fat Diets: An Uncontrolled Policy Experiment

The New York Times

Magazine

What if It's All Been a Big Fat Lie?

By GARY TAUBES

If the members of the American medical establishment were to have a collective find-yourself-standing-naked-in-Times-Square-type nightmare, this might be it. They spend 30 years ridiculing Robert Atkins, author of the phenomenally best-selling "Dr. Atkins' Diet Revolution" and "Dr. Atkins' New Diet Revolution," accusing the Manhattan doctor of quackery and fraud, only to discover that the unrepentant Atkins was right all along. Or maybe it's this: they find that their very own dietary recommendations -- eat less fat and more carbohydrates -- are the cause of the rampaging epidemic of obesity in America. Or, just possibly this: they find out both of the above are true.



Lendon Flanagan for The New York Times

Targeting Food Deserts Has Done Little to Reduce Obesity

- Food deserts are found in areas of high obesity
- But many variables confound the relationship
- Reverse causation is a distinct possibility

Medical Daily

Vitality

Under the Hood

Innovation

The Hill

The Grapevine

VITALITY

Fixing Food Deserts May Be A Waste Of Time: Having Access
To Healthy Food Won't Improve America's Health

Dec 8, 2015 06:07 PM By Samantha Olson

Evidence Is Lacking to Vilify Potatoes

- Observational study links potatoes with weight gain and diabetes
- More recent systematic review says no:
“The identified studies do not provide convincing evidence to suggest an association between intake of potatoes and risks of obesity, T2D, or CVD. French fries may be associated with increased risks of obesity and T2D although confounding may be present.”
- **See:** ConscienHealth, Time to Stop Dumping on Potatoes, 2016



Health Correlations

Proven to Be Cause and Effect

- Trans fats
- Saturated fats
- Whole grains



Summary and Conclusions

- **Bias harms the public and media credibility**
- **Distinguishing myths, presumptions, and facts requires critical thinking**
- **Distinctions between correlation and causation are often overlooked**
- **Pictures (and headlines) can undermine even the best reporting**