

Fat Studies: ICL Presentation

September 24, 2015

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today's agenda

1. Challenge some common assertions about the "obesity epidemic"
2. Consider the problems of weight stigma
3. Consider an alternate model for health: HAES
4. Challenge the energy-balance model of weight, consider non-food routes to weight increase



Stamp issued by Belgium to commemorate the centenary of the death of Adolphe Quetelet (1796–1874), who in 1832 developed the 'Quetelet Index' now known as the Body Mass Index (BMI). – © Belgium post.

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dex

BMI= Body Mass Index=
weight in kilograms divided by square of height in meters
(no adjustment for gender, age, muscle mass, body type...)

BMI	Weight Status
Below 18.5	Underweight
18.5–24.9	Normal
25.0–29.9	Overweight
30.0 and Above	Obese

World news

Obesity epidemic 'bigger threat than terrorism'

**Associated Press
in Columbia**

Thursday 2 March 2006
19.04 EST

America's obesity epidemic will dwarf the threat of terrorism if the country does not reduce the number of people who are severely overweight, Richard Carmona, the US surgeon general, said yesterday.

"Unless we do something about it, the magnitude of the dilemma will dwarf 9/11 or any other terrorist attempt," he said during a lecture at the University of South Carolina.

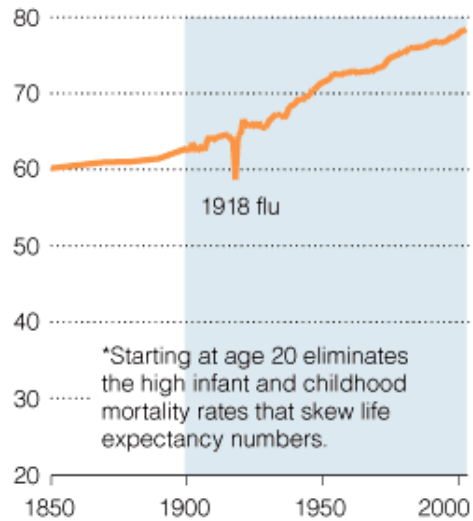


Longer Lives, Larger Bodies

In little more than a century, Americans have undergone remarkable growth in longevity and form.

People Today Live Longer

LIFE EXPECTANCY FOR THOSE AGE 20*



And They Look Different

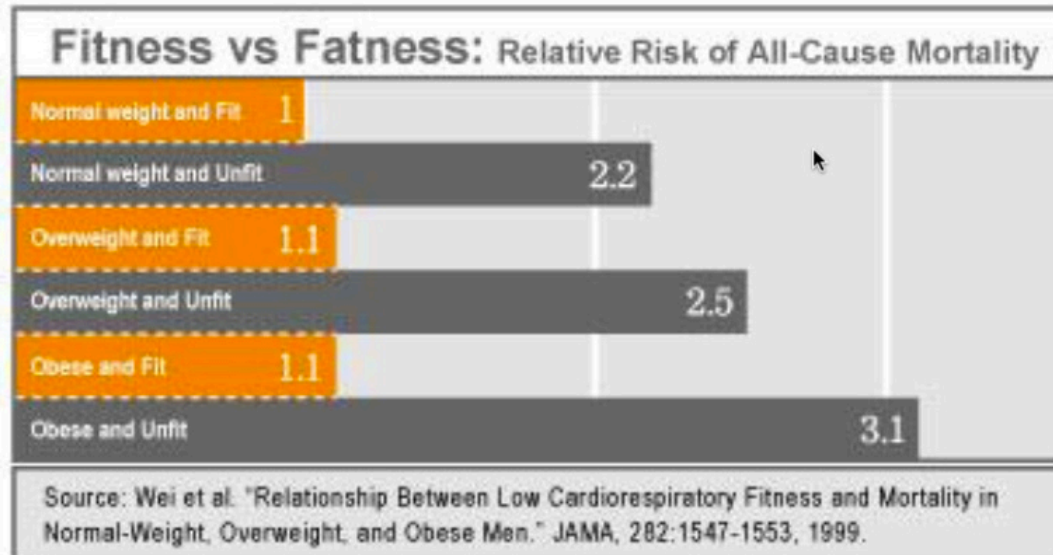
AVERAGE ADULT MALE



1850
5 feet 7.4 inches
and 146 pounds



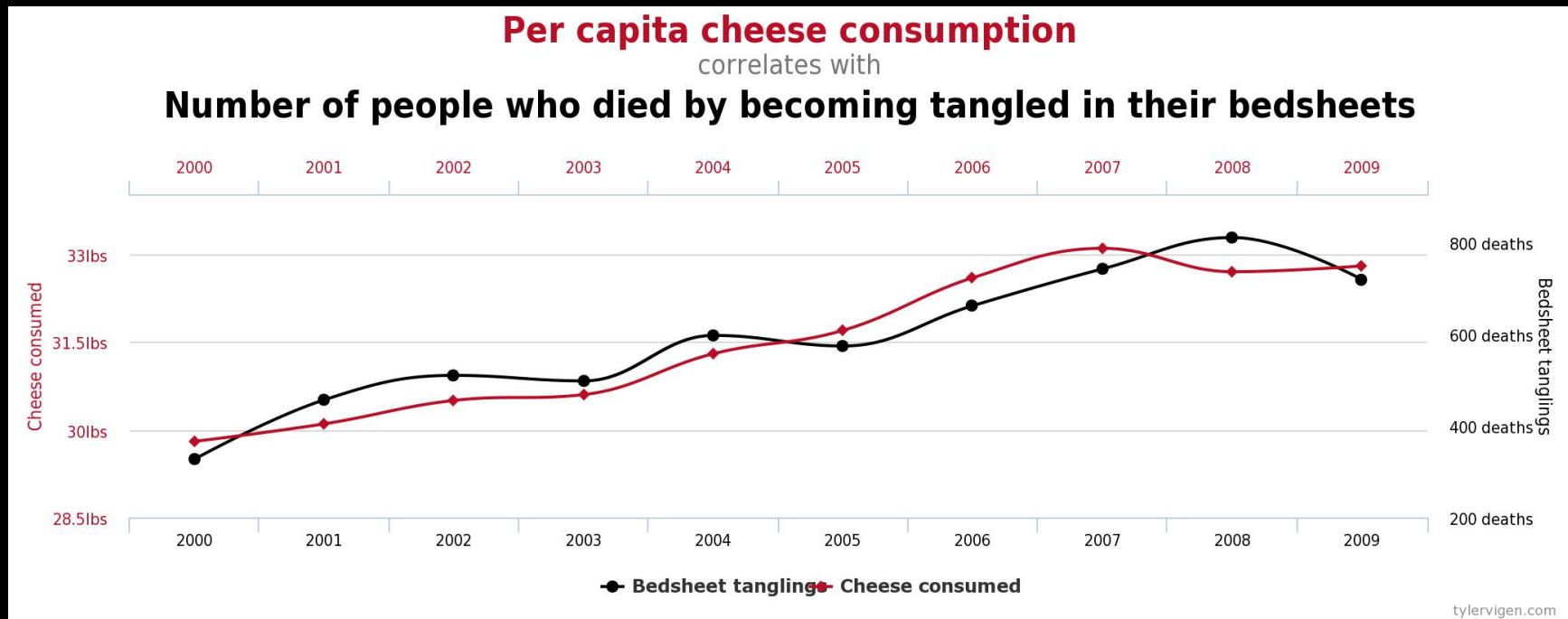
2000
5 feet 9.5 inches
and 191 pounds



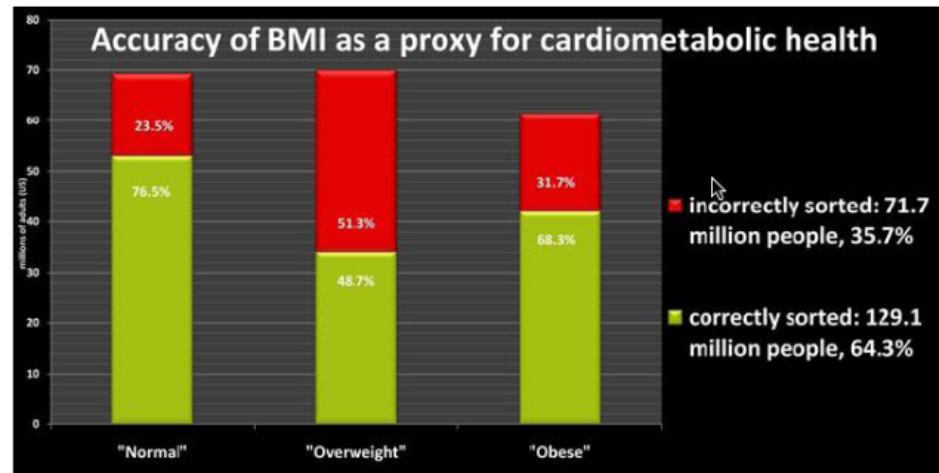
Some slides taken from Deb Burgard,
["The War on Obesity Makes Me Sick"](#)

Correlation is not causation

<http://www.tylervigen.com/spurious-correlations>



Using BMI, 51% of the healthy people are deemed unhealthy



Wildman RP, Muntner P, Reynolds K, McGinn AP, Rajpathak S, Wylie-Rosett J, Sowers MR: The obese without cardiometabolic risk factor clustering and the normal weight with cardiometabolic risk factor clustering: prevalence and correlates of 2 phenotypes among the US population (NHANES 1999-2004). *Arch Intern Med* 2008, 168:1617-1624.

Some slides taken from Deb Burgard,
["The War on Obesity Makes Me Sick"](#)

age, sex, and smoking).

Results Random-effects summary all-cause mortality HRs for overweight (BMI of 25-<30), obesity (BMI of ≥ 30), grade 1 obesity (BMI of 30-<35), and grades 2 and 3 obesity (BMI of ≥ 35) were calculated relative to normal weight (BMI of 18.5-<25). The summary HRs were 0.94 (95% CI, 0.91-0.96) for overweight, 1.18 (95% CI, 1.12-1.25) for obesity (all grades combined), 0.95 (95% CI, 0.88-1.01) for grade 1 obesity, and 1.29 (95% CI, 1.18-1.41) for grades 2 and 3 obesity. These findings persisted when limited to studies with measured weight and height that were considered to be adequately adjusted. The HRs tended to be higher when weight and height were self-reported rather than measured.

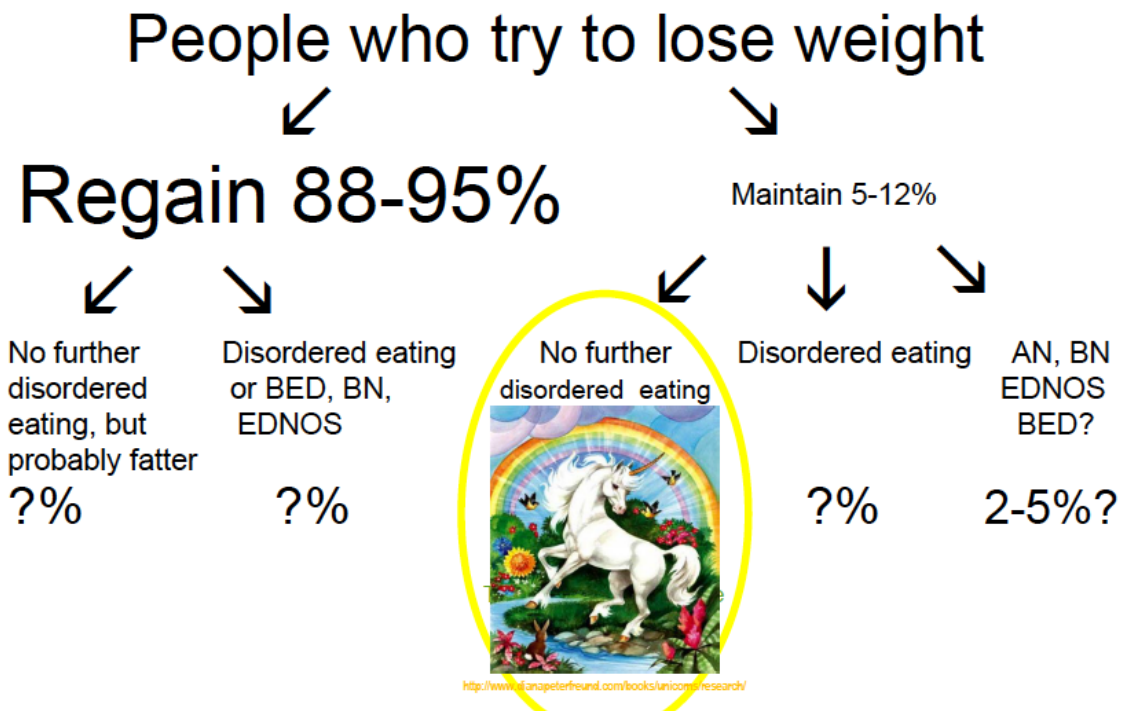
Conclusions and Relevance Relative to normal weight, both obesity (all grades) and grades 2 and 3 obesity were associated with significantly higher all-cause mortality. Grade 1 obesity overall was not associated with higher mortality, and overweight was associated with significantly lower all-cause mortality. The use of pre-defined standard BMI groupings can facilitate between-study comparisons.

JAMA. 2013;309(1):71-82

www.jama.com

Flegal, KM, Kit BK, Orpana H, Graubard BI. "Association of All-Cause Mortality With Overweight and Obesity Using Standard Body Mass Index Categories: A Systematic Review and Meta-analysis." *JAMA* 309.1 (2013): 71-82.

2-5 years outcomes



Some slides taken from Pat Burgard,
["The War on Obesity Makes Me Sick"](#)

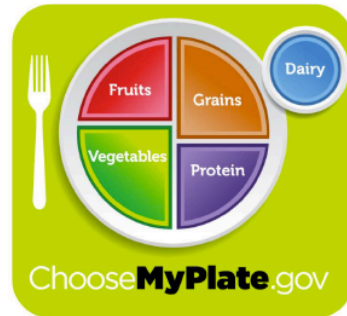


What studies show:

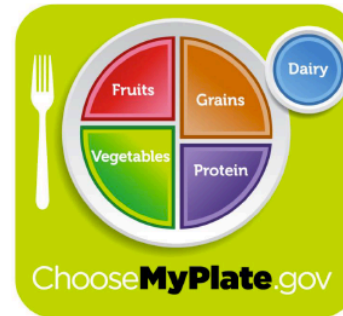
- ✓ Medical problems resolving with practices without weight loss
- ✓ Practices as sustainable over longer than 2 years
- ✓ Calmer and more consistent eating behavior
- ✓ Other confounded factors as causal for medical problems at higher BMI
- ✓ Failure of fat tissue loss to produce health benefits (liposuction vs. “diet and exercise” interventions)
- ✓ Higher BMI as protective at times (“obesity paradox”)
- ✓ Implausibility of sustained weight loss for vast majority of people
- ✓ Distinctive genetic and metabolic factors that determine BMI (vs. practices under individual control) (continued)

Some slides taken from Deb Burgard,
[“The War on Obesity Makes Me Sick”](#)

Metabolic demands of a WEIGHT SUPPRESSED person are 4-500 calories *less* each day



Never been at a higher weight
= right amount of food



Lost weight to become x weight
= "too much" food

Intake that would maintain a person at a given weight is
"overeating" for a weight-suppressed person at that weight.

Some slides taken from Deb Burgard,
["The War on Obesity Makes Me Sick"](#)

The things that make people healthier are not dependent on weight loss!

- Good nutrition
- Pleasurable physical activity
- Social support
- Restful sleep
- Access to quality medical care
- Meaningful work
- Physical safety
- A clean environment
- Social justice
- Freedom from stigma

Some slides taken from Deb Burgard,
["The War on Obesity Makes Me Sick"](#)

Use of BMI as a proxy for health is a failure to account for diverse bodies and lived experiences, and:

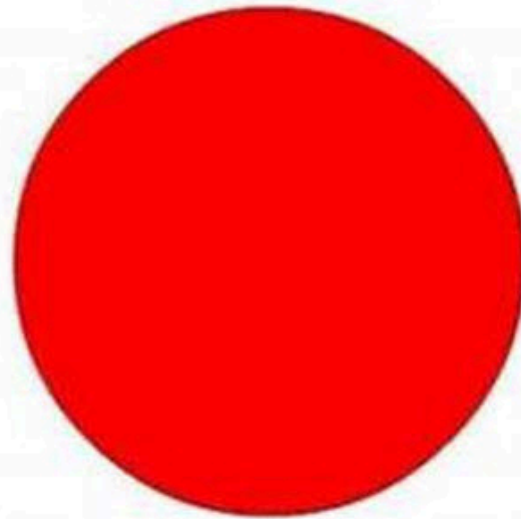
- Misdiagnoses nearly 2 in 5 people, with associated misery and cost
- Exposes people without health problems to treatments that are not harmless and may be iatrogenic
- Exposes people *with* health problems to treatments that are not harmless and may be iatrogenic
- Poisons the healing relationship between health care providers and patients
- Reinforces the existing weight stigma of health care providers, family members, workplace authorities, and intimate partners
- Adds to the internalized oppression of people across the weight spectrum but especially higher-weight people
- Adds to the burden of recovery for people with eating disorders
- Makes it harder for people to find intrinsic and sustainable motivations for the practices that support their well-being
- Diverts resources from challenging and addressing structural inequalities and social justice issues in public health






Some slides taken from Deb Burgard,
["The War on Obesity Makes Me Sick"](#)

1. Challenge some common assertions about the "obesity epidemic"

- Burgard, Deb. "The War On Obesity Makes me Sick." Keynote talk at Second Annual International Weight Stigma Conference, 2014. <http://stigmaconference.com/previous-conferences/canterbury-2014/>
- Brown, Harriet. "How Obesity Became a Disease." The Atlantic. 24 March 2015. Web.
- Campos, P., Saguy, A., Ernsberger, P., Oliver, E., & Gaesser, G. (2006). The epidemiology of overweight and obesity: Public health crisis or moral panic? *International Journal of Epidemiology*, 35: 55-60.
- Flegal, K., Graubard, B., Williamson, D., & Gail, M. (2007). Cause-specific excess deaths associated with underweight, overweight, and obesity. *JAMA*, 298(17): 2028-37.
- Flegal, K., Kit, B., Orpana, H. & Graubard, B. (2013). Association of all-cause mortality with overweight and obesity using standard body mass index categories: A systematic review and meta-analysis. *Journal of the American Medical Association*, 309(1): 71-82.
- Gaesser, G. (2009). Is "permanent weight loss" an oxymoron? The statistics on weight loss and the national weight control registry. In E. Rothblum & S. Solovay (Eds.), *The Fat Studies Reader* (37-41). New York: New York University Press.
- Guthman, J. (2013). Fatuous measures: The artificial construct of the obesity epidemic. *Critical Public Health*, 23(3): 263-73.
- Pietiläinen, K.H., et al. "Does Dieting Make You Fat?: A Twin Study." *International Journal of Obesity* 36 (2012): 456-464.

Consequences of the "obesity epidemic":



-  People buy clothing one size higher
-  Children have shorter lifespans than their parents
-  All US citizens become "obese" by 2050
-  Global environmental collapse from extra gas required to transport fatties
-  Global economic collapse from added healthcare costs for fatties who just won't die



WALL-E

<http://disneyscreencaps.com/wall%C2%B7e-2008/>

THE FAT STUDIES READER

EDITED BY
ESTHER ROTHBLUM AND SONORA SOLOWAY

FOREWORD BY MARILYN WAHNE



FAT STIGMA

In contemporary western societies, fatness is associated with:

- laziness
- greed
- lack of self-discipline and self-control
- 'letting yourself go'
- not caring about physical appearance or health
- shame
- Inevitable disease and early death

Some slides taken from Deborah Lupton,
["Why Are Fat Bodies So Stigmatised?"](#)

FAT PEOPLE: SOCIO-ECONOMIC STATUS

- more likely to live in poverty
- earn less income
- be unemployed
- have lower education levels
- be employed in lower status occupations
- experience lower living standards

Some slides taken from Deborah Lupton,
["Why Are Fat Bodies So Stigmatised?"](#)

Weight bias is rampant among healthcare providers and policy makers, especially in the field of obesity

- Barry CL, Brescoll VL, Brownell KD, Schlesinger M. [Obesity metaphors: How beliefs about the causes of obesity affect support for public policy](#). *Milbank Quarterly*. 2009 Mar;87(1):7-47.
- O'Brien KS, Puhl RM, Latner JD, Mir AS, Hunter JA. [Reducing anti-fat prejudice in preservice health students: A randomized trial](#). *Obesity*. 2010 Nov;18(11):2138-2144
- Puhl RM, Heuer CA. [The stigma of obesity: A review and update](#). *Obesity*. 2009 Jan;17(5):941-964.
- Puhl RM, Heuer CA. [Obesity stigma: Important considerations for public health](#). *American Journal of Public Health*. 2010 Jun;100(6):1019-1028.
- Puhl RM, Latner JD, King KM, Luedicke J. [Weight bias among professionals treating eating disorders: Attitudes about treatment and perceived patient outcomes](#). *International Journal of Eating Disorders*. 2013 Sep:1-11.
- Puhl RM, Luedicke J, Grilo CM. [Obesity Bias in Training: Attitudes, Beliefs, and Observations Among Advanced Trainees in Professional Health Disciplines](#). *Obesity*. 2013 Dec:1-8.
- Puhl RM, Luedicke J, Peterson JL. [Public Reactions to Obesity-Related Health Campaigns](#). *American Journal of Preventive Medicine*. 2013 July;46(1):36-48.
- Puhl RM, Peterson JL, Luedicke J. Fighting obesity or obese persons? Public perceptions of obesity-related health messages. *International Journal of Obesity*. 2012 Sep:1-9.
- Puhl RM, Wharton CM, Heuer CA. [Weight bias among dietetics students: Implications for treatment practices](#). *Journal of the American Dietetic Association*. 2009 Mar;109(3):438-444.
- Sabin JA, Marini M, Nosek BA. Implicit and explicit anti-fat bias among a large sample of medical doctors by BMI, race/ethnicity and gender. *PLoS One* 2012;7:e48448.

See also

<https://fathealth.wordpress.com/>

FIRST POSTED: FRIDAY, AUGUST 21, 2015 02:15 PM EDT | UPDATED: FRIDAY, AUGUST 21, 2015 03:00 PM EDT

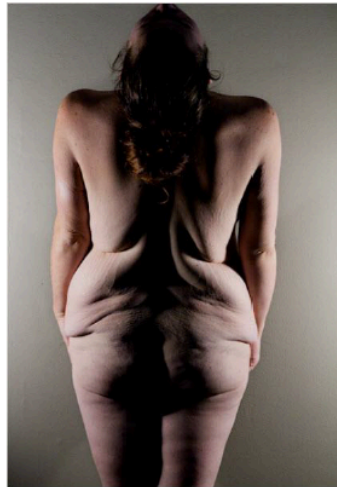


A new campaign is taking fat-shaming to a whole new level. (Project Harpoon Image)

Whether it's an intentional play on the phrase "inner beauty" or just a coincidence, a new fat-shaming trend called "thinner beauty" has emerged thanks to Photoshop and Instagram.

The trend takes real photos of plus-sized women and men and digitally edits them so they look thinner. All this without the consent of the people in the photos. The images are cropped side by side and captions are added such as "beautiful" and "not beautiful" - emphasizing that a thin body is the only type of body that looks beautiful.

Artist Julie Kozerski documented how the “after” of before/after weight loss does not turn you into a greyhound



Ruins No. 1

juliakozerski.com/half

Some slides taken from Deb Burgard,
[“The War on Obesity Makes Me Sick”](#)



Three-year-old Viktoria Karalexis and her mother Helen from Sunshine. Picture: Darren McNamara Source: Herald Sun

<http://www.couriermail.com.au/news/national/mum-shocked-by-fat-message-being-sent-to-children/story-e6fre00c-26260607720>

A MELBOURNE mother is horrified after a child and maternal health nurse labelled her healthy three-year-old daughter "obese".

Helen Karalexis said the incident occurred when she took Viktoria to the Sunshine Child and Maternal Health clinic for a routine check-up on Wednesday.

Ms Karalexis was concerned this was not an isolated case, and that it was sending children the wrong messages.

Her daughter is 108cm tall and weighs 21.1kg - when the nurse put these measurements into the computer, she told her Viktoria was obese.

Some slides taken from Deb Burgard,
["The War on Obesity Makes Me Sick"](#)

This kid is fat (according to the City of New York)

By Joe Tacopino, Gabrielle Fonrouge, Laura Italiano and Erin Calabrese

May 22, 2014 | 10:42pm

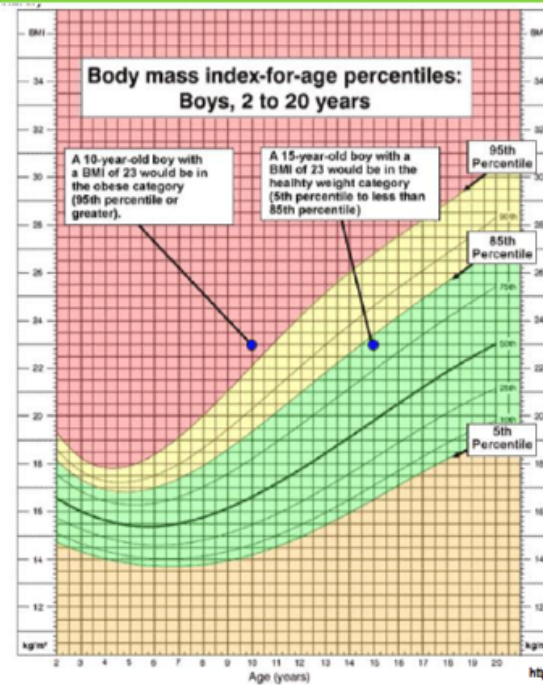


Gwendolyn Williams, a third-grader at PS 29, was told she was overweight by the Department of Education because she was 1 pound heavier than the index.

Photo: Stephen Yang

Some slides taken from Deb Burgard,
["The War on Obesity Makes Me Sick"](#)

Problems with using BMI data as the basis for children's public health policy

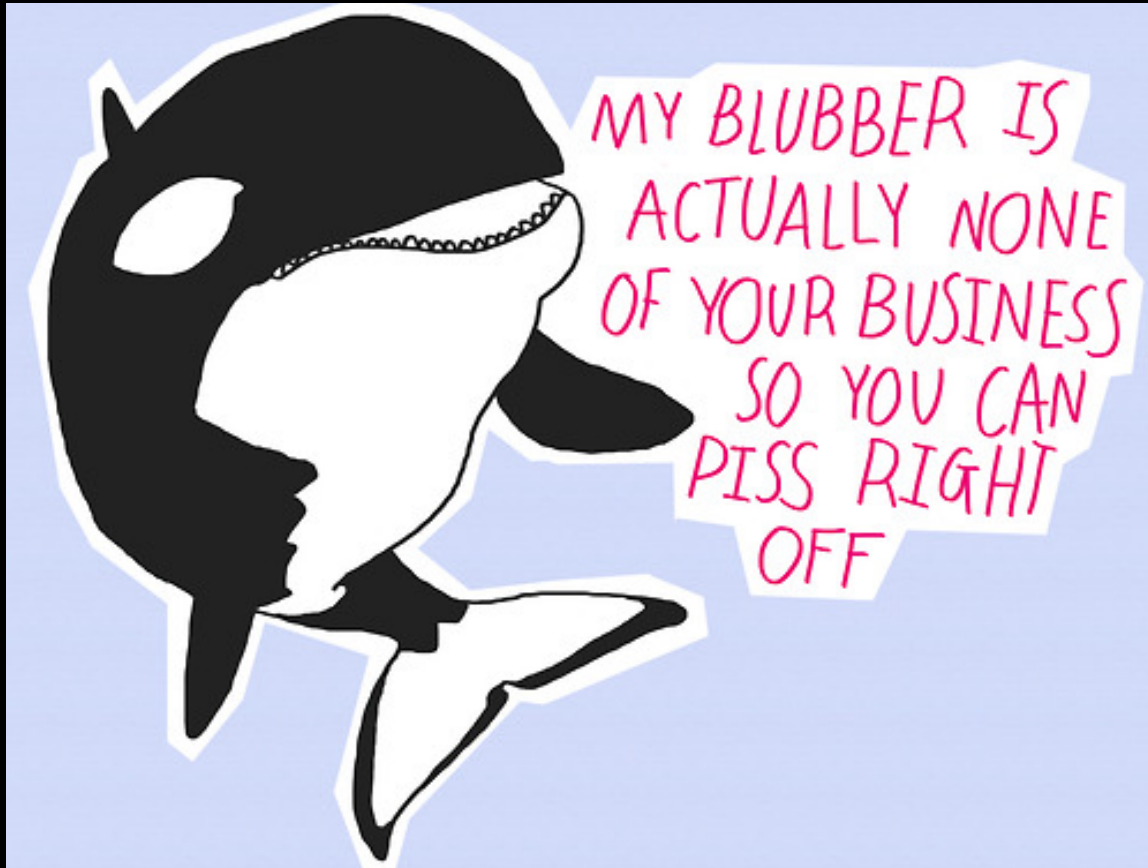


- ❑ Kids that grow faster than the 1970s are going to be deemed higher BMI.
- ❑ The category of "overweight" was the 95th percentile before 2007 and was tripled to include the 85th percentile and above after 2007.
- ❑ The cutoffs for diabetes were lowered so that a FBG of 126 is now the cutoff for diagnosis.
- ❑ The CDC states that Type 2 diabetes is so rare in children that they do not have data. The majority of new cases in non-adults are in people who have reached their adult stature in their late teens and even then the rate is about 18 in 10,000 in the US.
- ❑ Because we were not screening for Type 2 diabetes in youth before and because the cutoffs are lower now, it is not knowable whether there are more cases now.

Some slides taken from Deb Burgard,
["The War on Obesity Makes Me Sick"](#)

The problem of weight stigma

- Bergman, S. Bear. "Part-Time Fatso." *The Fat Studies Reader*. Ed. Esther Rothblum and Sondra Solovay. NY: NYU P, 2009.
- Brewis, Alexandra A., et al. "Body Norms and Fat Stigma in Global Perspective." *Current Anthropology* 52.2 (2011): 269-276.
- LeBesco, Kathleen. "Neoliberalism, Public Health, and the Moral Perils of Fatness." *Critical Public Health* 21.2 (2011): 153-164.
- Lyons, Pat. "Prescription for Harm: Diet Industry Influence, Public Health Policy, and the 'Obesity Epidemic.'" *The Fat Studies Reader*. Ed. Esther Rothblum and Sondra Solovay. NY: NYU P, 2009. 75-87.
- Wann, M. (2009). Forward: Fat studies: An invitation to revolution. In E. Rothblum & S. Solovay (Eds.), *The Fat Studies Reader* (ix-xxv). New York: New York University Press.
-



MY BLUBBER IS
ACTUALLY NONE
OF YOUR BUSINESS
SO YOU CAN
PISS RIGHT
OFF

Outcome	Diet		HAES	
	1 year	2 year	1 year	2 year
Weight	Lost (-5 kg)	No change (regained)	No change	No change
Health Improvements	Many	None Sustained	Many	total cholesterol, LDL, blood pressure, depression, self-esteem
Health habit Improvements	Many	None Sustained	Many	activity, disordered eating
Health Decrement	None	Self-esteem; Felt "like failures"	None	None
Attrition	42%		8%	

Bacon et al, Journal of the American Dietetic Association; 2005: 105:929

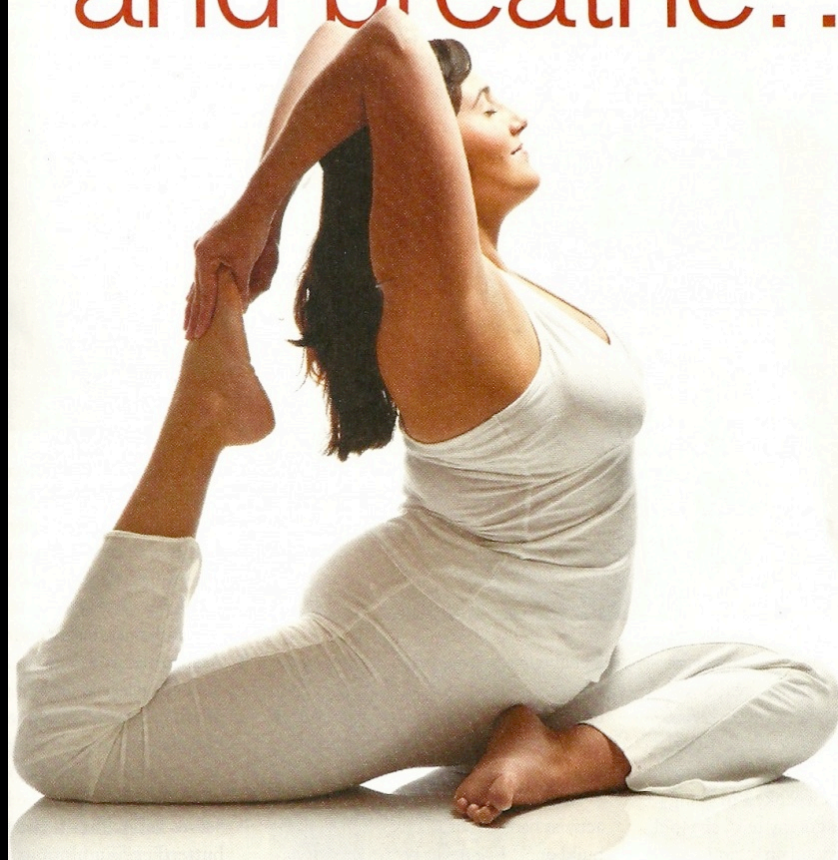
See also

<http://www.healthateverysize.org.uk/faq.html> - whatishaes

Consider an alternate model: HAES

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- Bacon, L. & Aphramor, L. (2011). Weight science: Evaluating the evidence for a paradigm shift. *Nutrition Journal*, 10(9).
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- Burgard, D. (2009). What is “Health At Every Size”? In E. Rothblum & S. Solovay (Eds.), *The Fat Studies Reader* (42-53). New York: New York University Press.
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- Association for Size Diversity and Health (ASDAH). (2009). Health at Every Size Fact Sheet. Retrieved from <http://www.sizediversityandhealth.org/images/uploaded/HAES%20FACT%20SHEET%20SM%20rev%206%206%2010.pdf>
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- <https://simplysociology.wordpress.com/2012/09/24/a-sociological-critique-of-the-health-at-every-size-movement/>

and breathe...





Known and Suspected Obesogens

Diet

- Fructose
- Genistein
- Monosodium Glutamate

Smoking*

- Nicotine

Pharmaceuticals

- Diethylstilbestrol
- Estradiol

Industrial Chemicals

- Bisphenol A (BPA)
- Organotins
- Perfluorooctanoic Acid (PFOA)
- Phthalates
- Polybrominated Diphenyl Ethers (PBDEs)
- Polychlorinated Biphenyl Ethers (PCBs)

Organophosphate Pesticides

- Chlorpyrifos
- Diazinon
- Parathion

Other Environmental Pollutants

- Benzo[a]pyrene
- Fine Particulate Matter (PM_{2.5})
- Lead

* Cigarette smoke is also a source of exposure to benzo[a]pyrene and PM_{2.5}



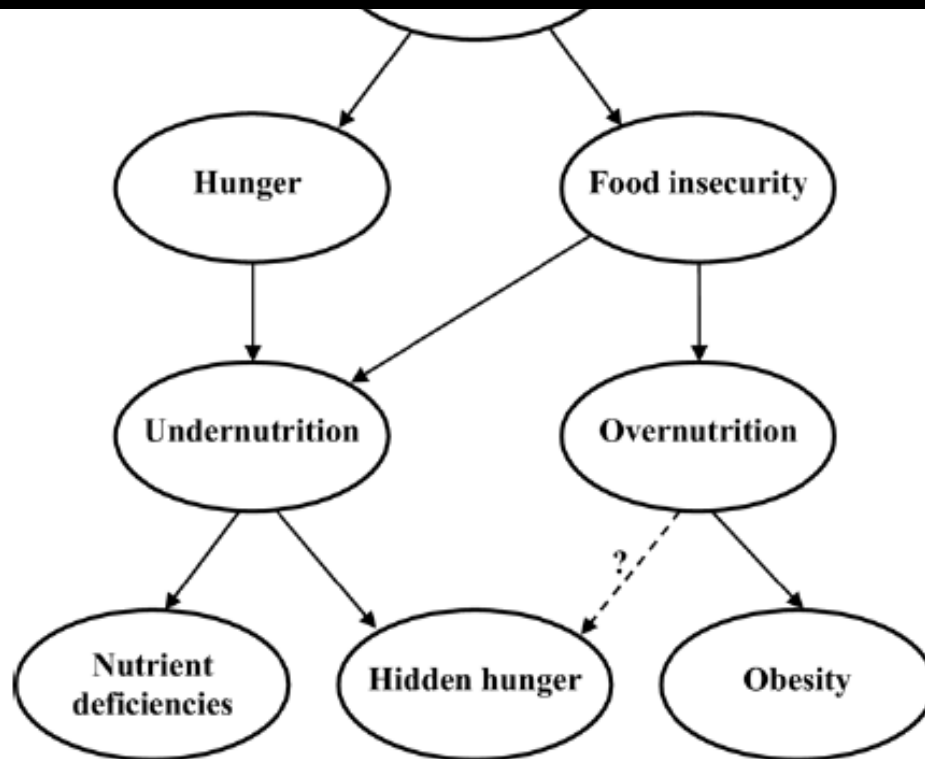
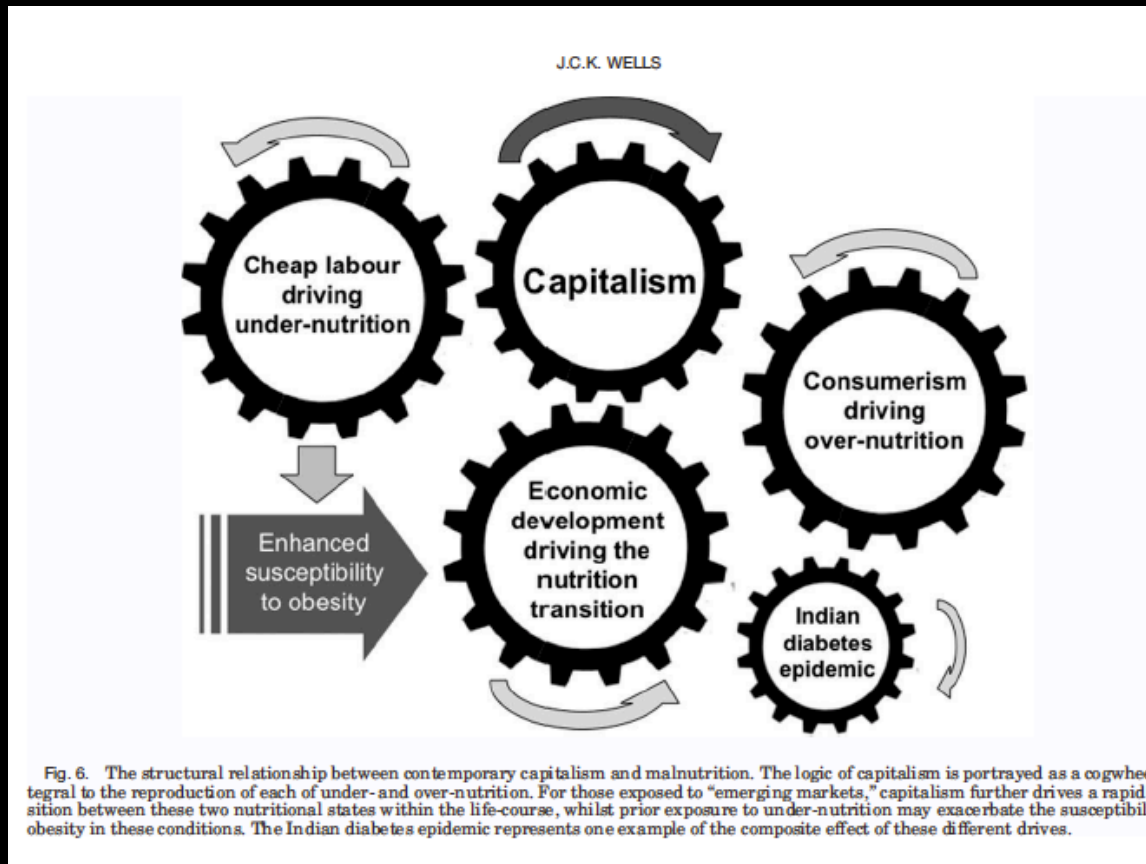


Figure 2. Poverty almost inevitably leads to hunger and food insecurity. This can lead to malnourished individuals, which can result in overt clinical signs of nutrient deficiency or micronutrient depletion that is not

Wells, J.K. "Obesity as Malnutrition: The Role of Capitalism in the Obesity Global Epidemic." *American Journal Of Human Biology* 24 (2012): 261–276.



Wells, JK. "Obesity as Malnutrition: The Role of Capitalism in the Obesity Global Epidemic." *American Journal Of Human Biology* 24 (2012): 261–276.

SITY AS MALNUTRITION

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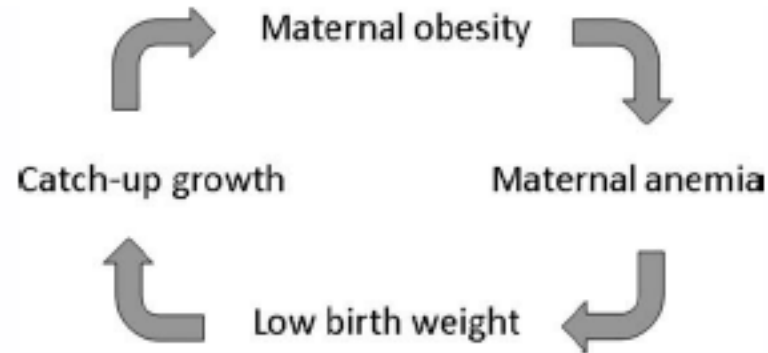
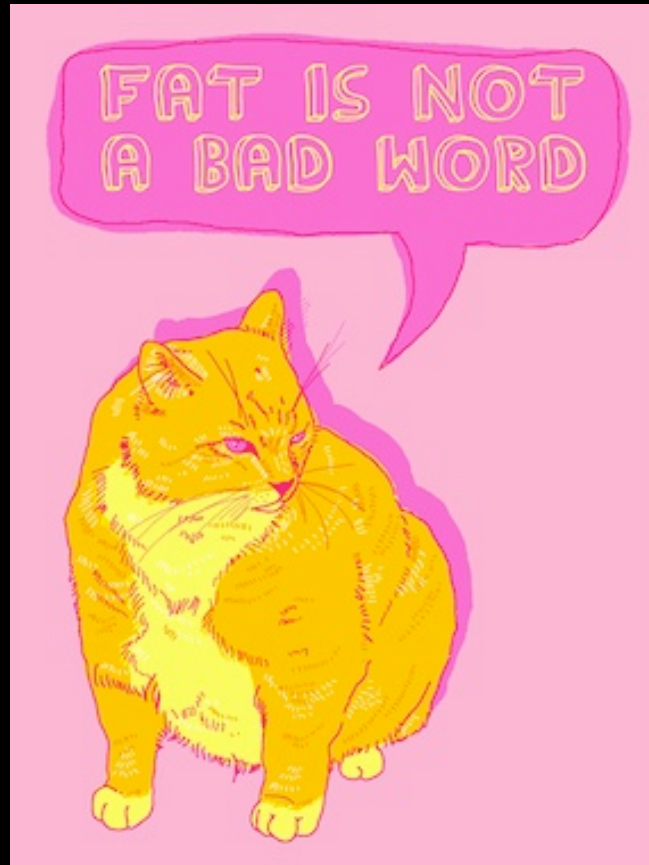


Fig. 7. A proposed intergenerational cycle, based on a link between maternal obesity and reduced birth weight in the next generation, predisposing to catch-up growth in the offspring with increased obesity risk. Recent research suggests that the inflammatory load of obesity reduces iron absorption (Cepeda-Lopez et al., 2011), predisposing to maternal anemia (Zimmermann et al., 2008) and hence potentially to low birth weight. This hypothesis merits testing to clarify the malnutrition status of obesity.

Wells, J.K. "Obesity as Malnutrition: The Role of Capitalism in the Obesity Global Epidemic." *American Journal Of Human Biology* 24 (2012): 261–276.

Challenging the energy-balance model of weight, considering non-food route to weight increase

- Allison, David B., et al. "Canaries in the Coal Mine: A Cross-Species Analysis of the Plurality of Obesity Epidemics." *Proceedings of the Royal Society B* 278 (2011): 1626-1632.
- Campaign for Healthier Solutions. "A Day Late and a Dollar Short: Discount Retailers are Falling Behind on Safer Chemicals." *Coming Clean*, 2015. Web.
- Commission for Racial Justice. United Church of Christ. *Toxic Wastes and Race in the United States: A National Report on the Racial and Socio-Economic Characteristics of Communities with Hazardous Waste Sites*. New York: Public Data Access, 1987.
- Gard, Michael, and Jan Wright. *The Obesity Epidemic: Science, Morality, and Ideology*. London: Routledge, 2005.
- Guthman, Julie. "Opening Up the Black Box of the Body in Geographical Obesity Research: Toward a Critical Political Ecology of Fat." *Annals of the Association of American Geographers*. 102.5 (2012): 951-957. Web.
- Kirkland, Anna. "The Environmental Account of Obesity: A Case for Feminist Skepticism." *Signs: Journal of Women in Culture and Society* 36.2 (2011): 463-485. Print.
- Wells, Jonathan C.K. "Obesity as Malnutrition: The Dimensions Beyond Energy Balance." *European Journal of Clinical Nutrition* 67 (2013): 507-512.
- ---. "Obesity as Malnutrition: The Role of Capitalism in the Obesity Global Epidemic." *American Journal Of Human Biology* 24 (2012): 261-276.
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Fat Studies: ICL Presentation

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