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

<table>
<thead>
<tr>
<th>BMI</th>
<th>Weight Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 18.5</td>
<td>Underweight</td>
</tr>
<tr>
<td>18.5—24.9</td>
<td>Normal</td>
</tr>
<tr>
<td>25.0—29.9</td>
<td>Overweight</td>
</tr>
<tr>
<td>30.0 and Above</td>
<td>Obese</td>
</tr>
</tbody>
</table>
Obesity epidemic 'bigger threat than terrorism'

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Life Expectancy for Those Age 20</th>
</tr>
</thead>
<tbody>
<tr>
<td>1850</td>
<td>20</td>
</tr>
<tr>
<td>1900</td>
<td>30</td>
</tr>
<tr>
<td>1950</td>
<td>50</td>
</tr>
<tr>
<td>2000</td>
<td>80</td>
</tr>
</tbody>
</table>

*Starting at age 20 eliminates the high infant and childhood mortality rates that skew life expectancy numbers.

And They Look Different

- **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

Per capita cheese consumption correlates with
Number of people who died by becoming tangled in their bedsheets
Using BMI, 51% of the healthy people are deemed unhealthy

Accuracy of BMI as a proxy for cardiometabolic health

<table>
<thead>
<tr>
<th>Category</th>
<th>Incorrectly Sorted</th>
<th>Correctly Sorted</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Normal&quot;</td>
<td>76.5%</td>
<td>129.1 million people, 64.3%</td>
</tr>
<tr>
<td>&quot;Overweight&quot;</td>
<td>51.3%</td>
<td></td>
</tr>
<tr>
<td>&quot;Obese&quot;</td>
<td>31.7%</td>
<td></td>
</tr>
</tbody>
</table>


Some slides taken from Deb Burgard, “The War on Obesity Makes Me Sick”
2-5 years outcomes

People who try to lose weight

Regain 88-95%

Maintain 5-12%

No further disordered eating, but probably fatter

Disordered eating or BED, BN, EDNOS

No further disordered eating

Disordered eating

AN, BN EDNOS BED?

?%

?%

?%

2-5%?

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

Choose MyPlate.gov

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"


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 ROTHBILUM AND SONORA SOLOVAY

FOREWORD BY MARILYN MANNS
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?”
Weight bias is rampant among healthcare providers and policy makers, especially in the field of obesity


See also

https://fathealth.wordpress.com/
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

juliakozerski.com/half

Some slides taken from Deb Burgard, “The War on Obesity Makes Me Sick”
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.

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

Some slides taken from Deb Burgard, “The War on Obesity Makes Me Sick”
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

Body mass index-for-age percentiles: Boys, 2 to 20 years

- 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

MY BLUBBER IS ACTUALLY NONE OF YOUR BUSINESS SO YOU CAN PISS RIGHT OFF.
<table>
<thead>
<tr>
<th>Outcome</th>
<th>Diet</th>
<th>HAES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 year</td>
<td>2 year</td>
</tr>
<tr>
<td></td>
<td>1 year</td>
<td>2 year</td>
</tr>
<tr>
<td>Weight</td>
<td>Lost (-5 kg)</td>
<td>No change (regained)</td>
</tr>
<tr>
<td>Health</td>
<td>Many</td>
<td>None</td>
</tr>
<tr>
<td>Improvements</td>
<td></td>
<td>Sustained</td>
</tr>
<tr>
<td>Health habit</td>
<td>Many</td>
<td>None</td>
</tr>
<tr>
<td>Improvements</td>
<td></td>
<td>Sustained</td>
</tr>
<tr>
<td>Health Decrement</td>
<td>None</td>
<td>Self-esteem; Felt “like failures”</td>
</tr>
<tr>
<td>Attrition</td>
<td>42%</td>
<td>8%</td>
</tr>
</tbody>
</table>


See also
http://www.healthateverysize.org.uk/faq.html - whatishaes
Consider an alternate model: HAES

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 Biphenyls (PCBs)

Organophosphate Pesticides
- Chlorpyrifos
- Diazinon
- Parathion

Other Environmental Pollutants
- Benz(a)pyrene
- Fine Particulate Matter (PM$_{2.5}$)
- Lead

* Cigarette smoke is also a source of exposure to bisphenol A and PM$_{2.5}$
Challenging the energy-balance model of weight, considering non-food route to weight increase

- Wells, Jonathan C.K. "Obesity as Malnutrition: The Dimensions Beyond Energy Balance."
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