# Healthy weights:
# It's not about the weight

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# Objectives

1. When the focus is on weight
   a) Does it work?
   b) Example: Arkansas BMI report card
   c) Weight Bias

2. How can we shift the focus to health?
   a) What can we do?
   b) Example: Granola bars in schools

# Healthy **Weights**:
## Perception of risk

- Risk is difficult to interpret and manage
- Widely varying and conflicting sources of information:
  - Television
  - Newspaper
  - Internet
  - Journal articles
  - Books

"Strong beliefs about risk, once formed, change very slowly and are extraordinarily persistent in the face of contrary evidence"

(Vincent Covello, 1998)

# BMI Report Card

- In 2003 Arkansas legislators passed Act 1220
  - A comprehensive and coordinated approach to combat childhood obesity
  - Included a number of components
  - Most importantly included annual BMI screenings for every public school student
  - Results sent to parents in a confidential report

(Arkansas Center for Health Improvement, 2006, Fay W. Boozman, 2007)

# BMI Report Card

## The Impact of Act 1220 in Year Three

| category | Year 1 (2003) | Year 2 (2004–5) | Year 3 (2005–6) |
|---|---|---|---|
| Overweight | 20.9% | 20.8 % | 20.4 % |
| At risk for overweight | 17.2 % | 17.2 % | 17.1 % |
| Healthy weight | 60.1 % | 60.1 % | 60.6 % |
| Underweight | 1.8 % | 1.9 % | 1.9 % |
| Total students assessed* | 348,710 | 372,369 | 371,082 |

**Results presented include all data available for years 1 and 2 and data received by June 14, 2006 for year 3 analysis.*

- ***"The progression of the childhood obesity epidemic has been halted in Arkansas"***

(Arkansas Center for Health Improvement, 2006)

# BMI Report Card

## The Impact of Act 1220 in Year Three

- However….
  - Across the United States:
    - There has been no change in obesity rates in adolescents between 2003-2005.

      (YRBSS/CDC, 2008)

    - There was no significant increase in the prevalence of obesity in adults between 2003-2004 and 2005-2006 in the United States

      (NCHS data brief, 2007)

# BMI Report Card:

## *Unintended Consequences?*

- *Parental Perception*
  - Students more likely now to express concerns about their weight
    - Younger pupils had been the most adversely affected
    - 69% of children under age 10 now concerned about BMI
  - 38% of parents worried their child was more concerned about his/her weight than he/she should be

- *Child Perceptions*
  - The percentage of children being teased because of their weight increased from 6% to 12%

(Arkansas Center for Health Improvement, 2006)

# BMI Report Card:

## *Unintended Consequences?*

- Higher percentages of Arkansas youth now engage in risky behaviors to control their weight
  - Although they were not fatter, adolescent girls were:
    - 20% more likely to engage in unhealthful/risky behaviors to lose weight as compared to their peers nationwide.
    - 16.9% of adolescent girls went without eating for 24hrs or more to control their weight (national average: 15.8%).
    - 9.2% of adolescent girls reported taking diet pills and liquids (national average: 7.5%)
    - 8.1% of adolescent girls reported vomiting or taking laxatives to manage their weight (national average: 6.9%)

(Arkansas Center for Health Improvement, 2006, Youth Risk Behavior Surveillance, 2009)

# BMI Report Card:

## *Unintended Consequences?*

- Heavier teens were
  - 4x more likely to be embarrassed by the BMI measurement
  - 2 ½ times more likely to be engaging in dieting
  - 33% more likely to report being concerned about their weight
  - Yet, their health behaviours were generally *better* than their *thinner* peers
- Arkansas teens
  - Eat fewer fruits and vegetables
  - Drink less milk
  - Drink more soda
  - Engage in more risky weight loss behaviours

(Arkansas Center for Health Improvement, 2006, Youth Risk Behavior Surveillance, 2009)

# BMI Report Card

- The Arkansas program cost about $1million the 1st year
  - state funds
  - grants from private sources.
- The program cost about a third of that in the following year

(Chmelynski, 2005)

- No state programs to combat eating disorders in Arkansas.

# Consequences of Healthy **Weights**?

## Weight bias

- Weight bias due to misinformation & myths:
  - Stigma & shame will motivate people to diet and lose weight
  - People fail to lose weight because of poor self-discipline or lack of willpower
  - The individual is to blame and not environmental conditions
  - Obesity is the mark of a defective person

Weight bias *also* exists because our culture values thinness and encourages the media to portray obese individuals in a biased, negative way

(Rudd Report, 2008)

# Consequences of Healthy **Weights**?

## Weight bias

- The prevalence of weight discrimination has increased from 7% in 1995–1996 to 12% in 2004–2006.
- While the prevalence is relatively close to reported rates of race and age discrimination, there are virtually no legal or social sanctions against weight discrimination

(Andreyeva, Puhl, & Brownell, 2008).

# Consequences of Healthy **Weights**?

## Weight bias

- In last 40 years the stigmatization of obesity by children has increased
  - Fat children & teens are the least desirable playmate

(Latner & Stunkard, 2003; Strauss & Pollack, 2003)

- Weight bias affects how parents view their children & how children feel about themselves.
  - By 5 years of age, girls with higher weight status have a lower self-concept
  - Parents' concern about their child's weight and resultant restriction of access to food are associated with negative self-evaluations among girls

(Davison & Birch, 2001)

# Consequences of Healthy **Weights**?
## Weight bias

- Weight bias in the schools
  - Teachers say overweight students are untidy, more emotional, less likely to succeed at work, and more likely to have family problems
  - Forty-three percent of teachers agreed that “most people feel uncomfortable when they associate with obese people”
  - Teachers have lower expectations for overweight students (compared to thinner students) across a range of ability areas

(Rudd Report, 2008)

# Consequences of Healthy **Weights**?

## Weight bias

- Consequences of weight bias in the schools:
  - Obese elementary school children miss more days of school
  - Obese adolescent girls are less likely to attend college compared to non-obese girls
  - Weight-based bullying makes young people more likely to engage in unhealthy eating patterns and avoid physical activity

(Rudd Report, 2008)

# Consequences of Healthy **Weights**?
## Weight bias

- Healthcare providers hold negative stereotypes of obese patients:
  - Physicians report viewing obese patients as awkward, unattractive, ugly, and noncompliant

(Foster, et al., 2003)

- These biases also affect researchers.
  - Obesity researchers show very strong weight bias, indicating pervasive and powerful stigma

(Schwartz, Chambliss, Brownell, Blair, & Billington, 2003)

- How much do these biases impact health care clinical outcomes or the interpretation of results remains not only unanswered, but unexamined

(Puhl & Brownell, 2001)

# Consequences of weight bias

- Social and Economic
  - Social rejection
  - Worse academic outcomes
  - Lower socio-economic status
- Health
  - Behaviours (binge eating, unhealthy weight control practices, coping by eating more, refusing to diet, avoiding physical activity
  - Higher blood pressure, more stress, overall  poor quality of life
- Mental health
  - *Depression*
  - *Anxiety*
  - *Low Self-esteem*
  - *Poor body image*
  - *Suicidality*

(Rudd Report, 2008)

# What if focused on "**Health**y weights"

- Discourage dieting in youth
  - Adolescents who try to diet to lose weight
    - More likely to gain more weight
    - Self-esteem goes down as weight goes up

      (Neumark-Sztainer et al, 2007; Eisenberg et al, 2006)
- Healthy eating and regular exercise
  - Not the same as weight management
  - Should hold for all-cannot tell lifestyle by appearance
    - Naturally leaner children may have unhealthy lifestyle
    - Naturally larger children may have healthy lifestyle
  - Indicator of success may predict maintenance?

# What if focused on "**Health**y weights"

- What about Physical Activity
  - How we build our city
  - How we structure our work day
  - How we structure our schools
  - Socio-economic barriers
- What about healthy eating?
  - Food security
  - Variety
  - Free from untested additives
  - Time, environment, pleasure

# What if focused on "**Health**y weights"

- Rethink how we market obesity
  - The (incident) rates of new onset anorexia nervosa like eating disorders in children *under 13 yrs* is ***twice*** the rate of new onset type II diabetes in children *under 18 yrs*
    - Type II diabetes in children/adolescents is an "epidemic"?
    - Eating disorders are "rare disorders"?

(CPSP, 2005-2007; Ahmed, 2010)

- Rethink the definition of "healthy eating"
  - Everything in moderation?
    - Celebratory eating is normal
    - Allow development of intuitive eating
  - Allow granola bars with chocolate chips in all schools?