

# Obesity, ethics, and public health

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# Obesity considered by CDC to be a “winnable battle”

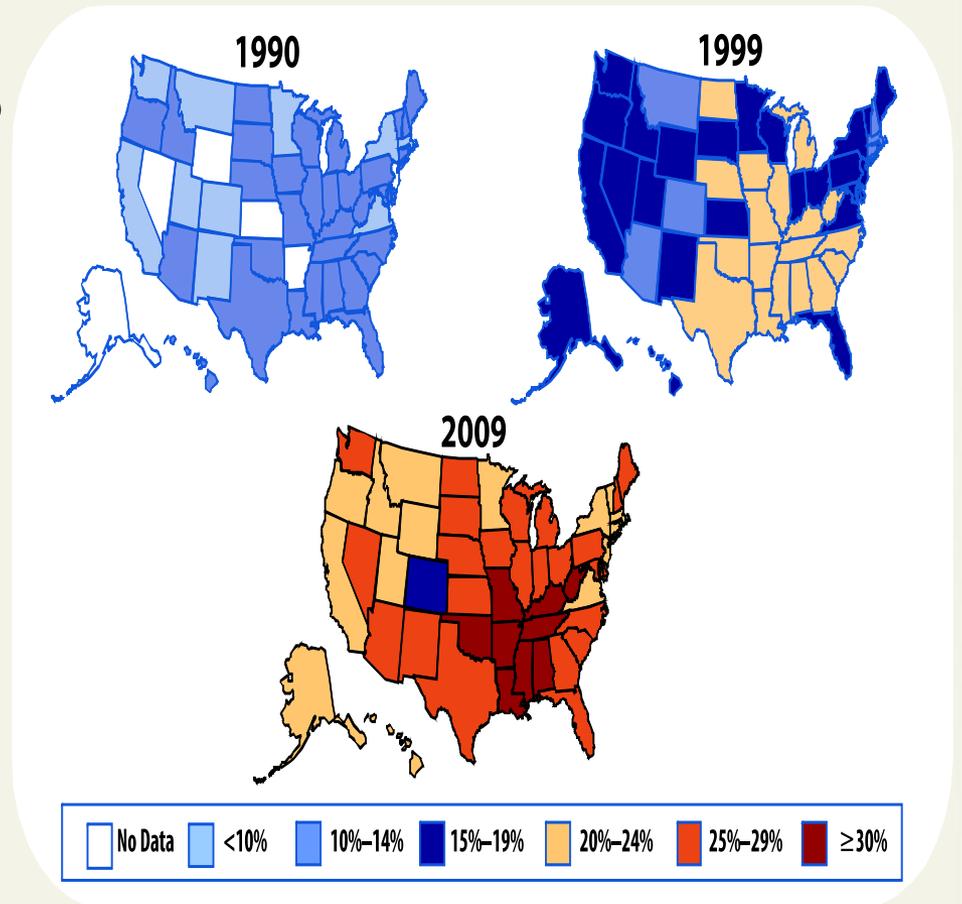
- Leading cause of illness, injury, death
- Huge costs
- Evidence-based interventions exist
- Can get results within 1 to 4 years—but it won't be easy

# Question:

- In 1990, every state in the USA had an obesity prevalence of less than 15%
- In 2015, what proportion of U.S. states had an obesity prevalence **greater than 20%**?

# Change in obesity prevalence in last 25 years

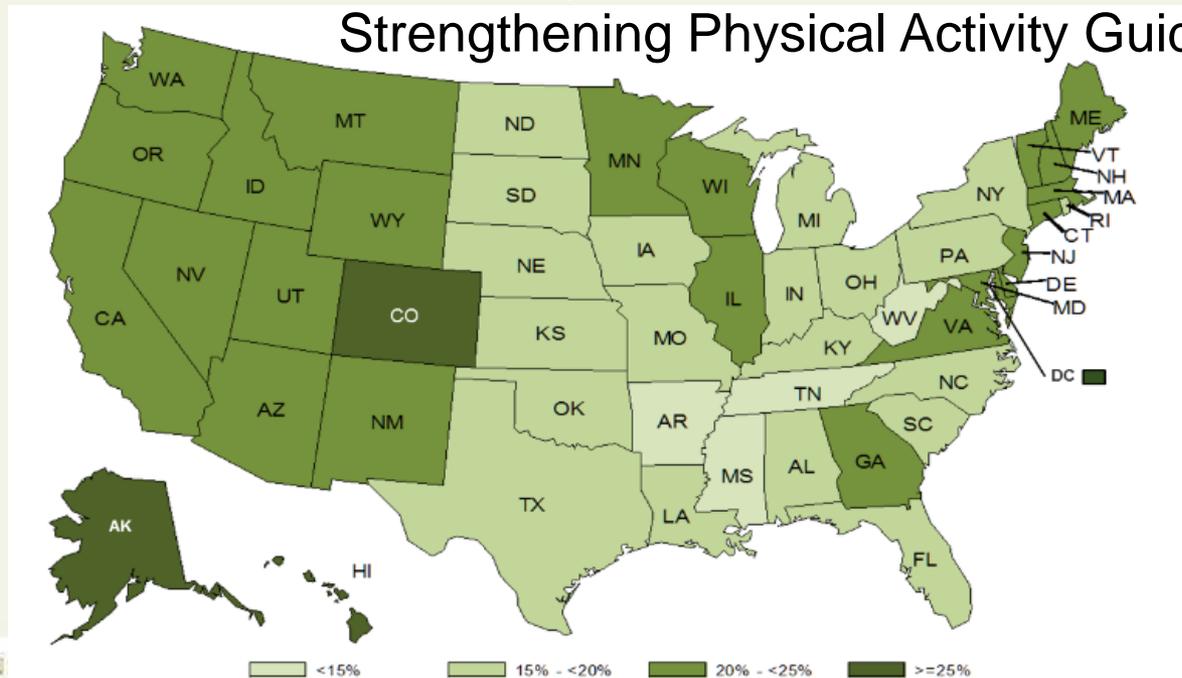
- **1990:** all states had obesity prevalence of <15%
- **2015:** all states had obesity prevalence of >20%, 25 states had >30%, and 4 states had >35%



# Many reasons why obesity has increased:

- Some related to less activity
  - 81% of adults do not meet federal guidelines regarding exercise and strengthening

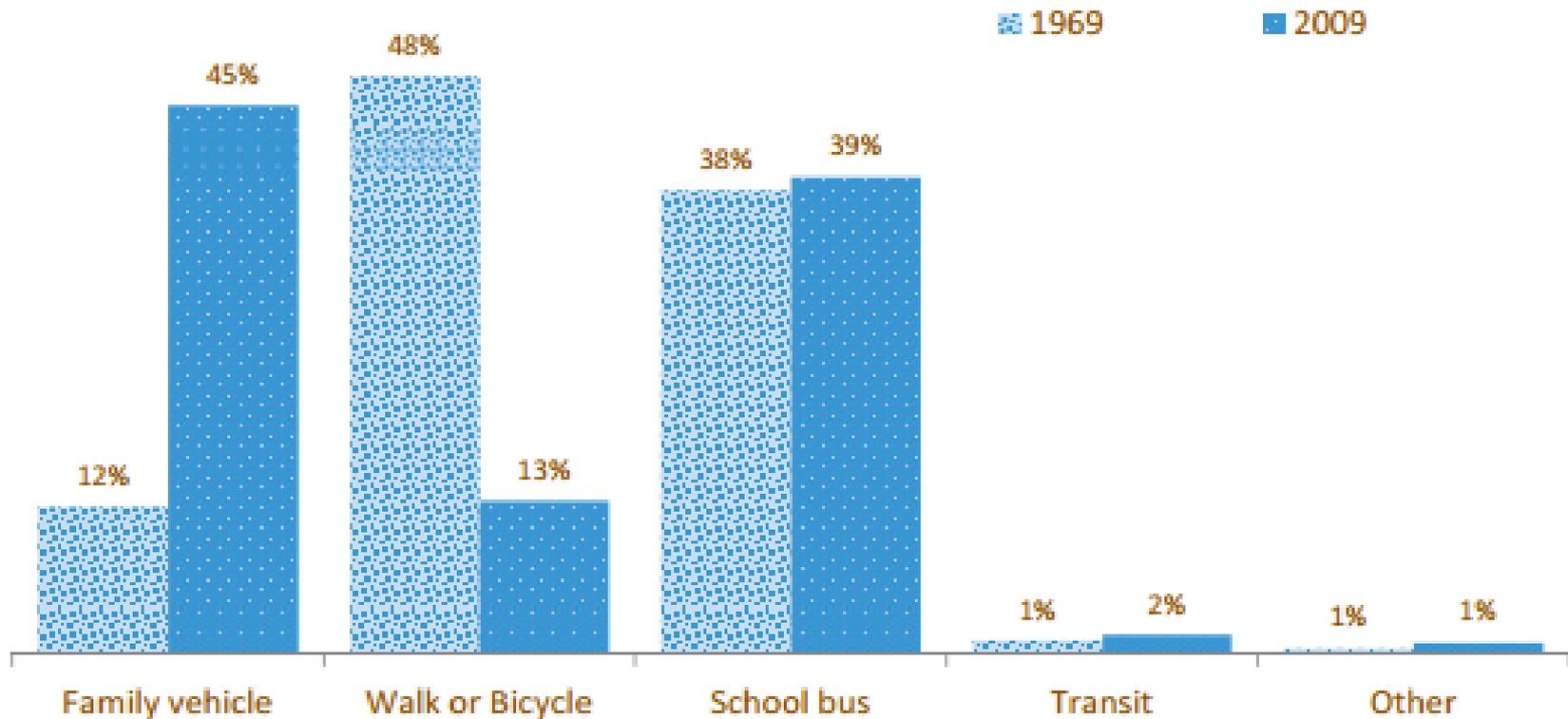
Proportion of U.S. Adults Meeting Aerobic and Muscle-Strengthening Physical Activity Guidelines by State (BRFSS, 2013)



# Active Transportation by Youth has Decreased

*Mode for Trips to School – (National Center for Safe Trips to School- 2011)*

Figure 1. Comparison of the Usual Travel Mode To School for K-8<sup>th</sup> Grade Students, 1969 and 2009



# Increased TV Viewing Increases Childhood Obesity Prevalence

- \$1.79 billion/year marketing food/drinks to youth
  - \$280 million for healthy foods
  - \$900 million targeted to children < 12 years old
- 70% food ads during kids' TV programs for junk food
- 2/3 kids' websites have food ads; 84% for junk food
- 2010: preschoolers viewed 213 ads on average for sugary drinks
- Harris/Brownell 2009: Children randomized to food ads vs. other ads; snack available throughout; food ad exposed ate 45% more, independent of hunger

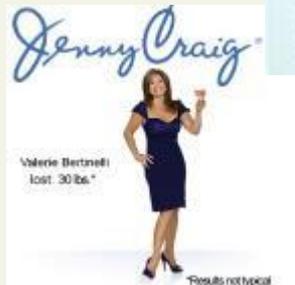
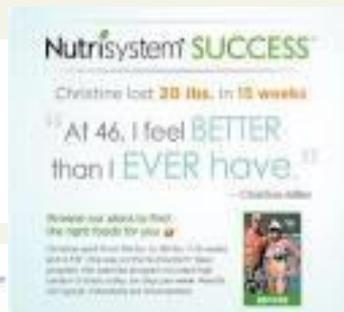
# Shifts in Dietary patterns in the United States (CDC)

- Prices of healthier foods have increased faster than prices for less healthy foods
- Increased portion size
- Increased consumption of processed (less healthy) foods
- Increased vending and a la carte foods in schools (2014 forbidden- HHFKA)



# Strategies targeting individual behavior change

- 1990- Food package labeling
- 1992- Food pyramid and 2011- Food plate
- Michelle Obama- Let's Move!
- \$60 billion/year diet industry



# CDC: To improve the public's health, change the environment...

- CDC:
  - “Policy and environmental approaches that make healthy choices available, affordable, and easy could be most effective in fighting obesity.”

# Some “environmental” strategies have been recommended previously

- Minimum distance of fast food restaurants from public schools
- Ban of trans fats from restaurant cooking (2006)
- Forbid advertising of sugar sweetened cereal during children’s television programming



# What is our free, self-determined, autonomous choice regarding eating?

## ▪ Behavioral research on eating behavior

- Modified prices in vending machines changes our snack choices
- Size of plate impacts how much we eat
- Size of serving bowl impacts how much we take
- Modified placement of foods in cafeteria changes our food choices
- Red vs. green calorie labeling



# Food choices, policy, and liberty

- What are the implications of behavioral data on how we understand autonomous choice?
- Are all liberties created equal? Which liberties require greatest/any protection?
- Is it in any way more troubling if government (PH) changes our food environment than if corporations change our food environment?
- And by the way, does (and how does?) justice matter here, too?

# CDC's Priority Strategies to Address Obesity “winnable battle” initiative

## ▪ **Energy density**

- Apply nutrition standards in child care/schools
- Increase number of healthy food retail outlets in underserved areas and improve access

## ▪ **Fruits and vegetables**

- Increase access through retail stores
- Support Farm to Institution policies
- Leverage food policy councils

## ▪ **Sugared drinks**

- Ensure access to safe and good-tasting water
- Reduce accessibility of sugared drinks in child care and schools

# Why target Sugar Sweetened Beverages?

- **Largest single source of calories** – average of about 12% of total calories per day
- **Intake has tripled:** 50 calories/day of SSBs in 1970s to 151 calories per day in 2010
  - Half of American adults drink SSBs on any given day (64% of youth)
- **Strong associations:** drinking SSBs, obesity, diabetes
  - Each SSB serving increases chance of obesity 60%
- **Liquid calories less satiating-**
  - SSBs usually *added* to diet, not substituted for other calories
- **Absolutely no nutritional value- no need at all**

# **Ethical acceptability of different policies or programs?**

- Option 1: Increase tax on SSBs to 20%
- Option 2: Eliminate SSBs from covered SNAP benefits
- Option 3: Forbid sale of SSBs in cups larger than 16 oz

# Increase taxes on SSBs

- Proposal for high rate, comparable to cigarette taxes
- Recently passed in Berkeley and Philadelphia
- Current SSB taxes in states at much lower levels
- Tobacco was price sensitive; expectation of same for SSBs, especially among adolescents
- Modeling suggests reduction 10-50 calories/day
- **Thoughts??**

# Taxing SSBs at higher rate than usual sales tax

- Justice- Regressive
  - For which goods are progressive policies required?
- No impact on liberty
- Some argue increases fairness, given agricultural subsidies?

# SNAP prohibitions on SSB

- Food stamp program started in 1964
  - Initially as an income supplementation program and in response to surplus agriculture
- Covers all food/drink that is not prepared or hot
- Does not cover paper, hygiene, alcohol, cigarettes
- Proposals for it to also not cover SSBs
- Thoughts??

# SNAP and SSBs

- May reduce consumption? Empirical question
- Liberty? SNAP doesn't cover all of a family's purchases; can still use non-SNAP funds to purchase
- Justice: Limits access for low income people but not others
- Justice: Government message to limit only for low-income people, but not for others

# Mayor Bloomberg and the 16 oz soda proposal for New York City

- Proposal to limit size of soda cups purchased to 16 oz
  - In restaurants, movie theaters, delicatessens, stadiums, street vendors
  - Not grocery or convenience stores
- No limit on number of cups one could purchase
- Thoughts?



# 16 oz cup size

- Liberty? Can buy multiple cups; no limits on choice to buy lots of soda
- Regressive? If one wants to buy a lot, likely costs more per ounce
- Justice: Targeted to all SSB consumers
- Evidence of benefit? Significant empirical data that defaults influence consumption behavior; this approach never tried

# Concluding thoughts

- Ethically, interventions **MUST** be effective
  - Where relevant data don't exist, collect it; do pilot programs, how much extrapolation?
- We are always subject to environmental changes and influences
  - Many environmental changes do not threaten liberties, despite fear of such
- Fairness must be central to public health, for its own sake and effect on outcomes