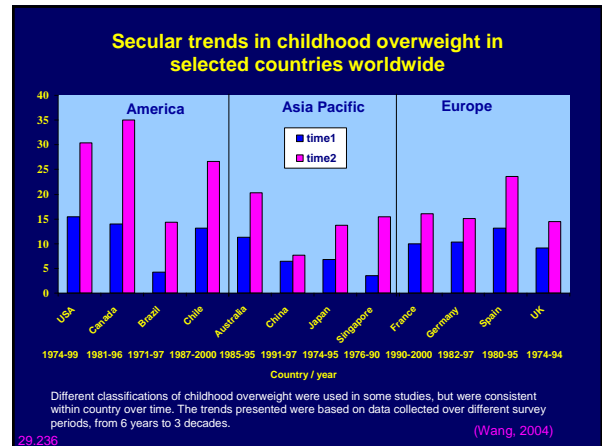




Nutrition in Public Health Policy Reform: Opportunity to be Gained or Lost

Walter C. Willett, MD, DrPH
Department of Nutrition
Harvard School of Public Health

October 22, 2008



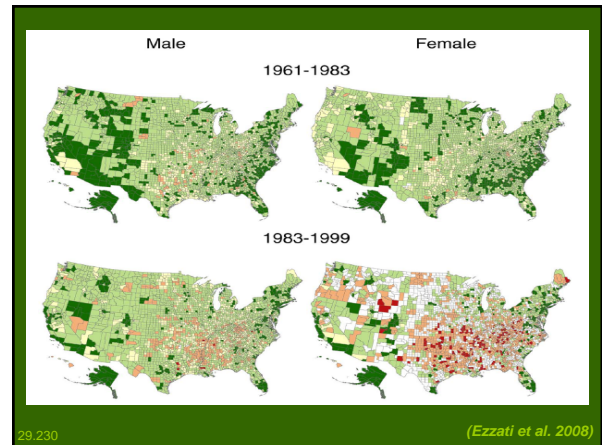
A Potential Decline in Life Expectancy in the United States in the 21st Century

S. Jay Olshansky, Ph.D., Douglas J. Passaro, M.D., Ronald C. Hershow, M.D., Jennifer Layden, M.P.H., Bruce A. Carnes, Ph.D., Jacob Brody, M.D., Leonard Hayflick, Ph.D., Robert N. Butler, M.D., David B. Allison, Ph.D., and David S. Ludwig, M.D., Ph.D.

"From our analysis of the effect of obesity on longevity, we conclude that the steady rise in life expectancy during the past two centuries may soon come to an end."

N Engl J Med, 2005; 352:1138-45

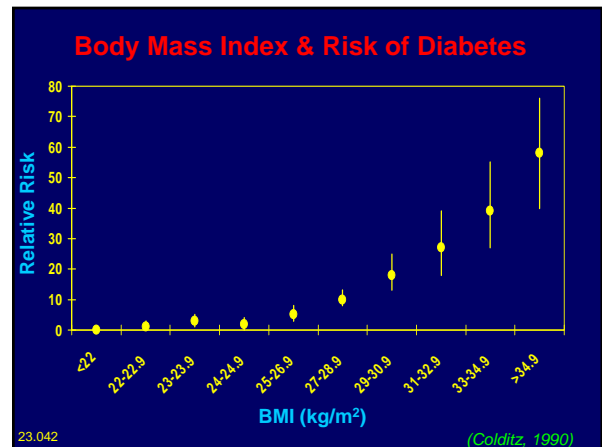
29.220



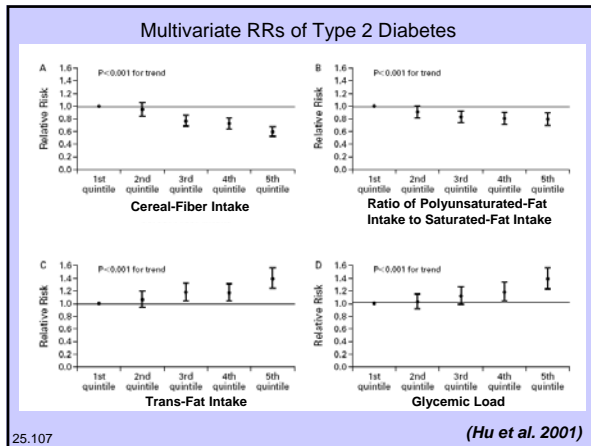
29.230

Observation: An unregulated market is doing to human health what it has done to the US economy

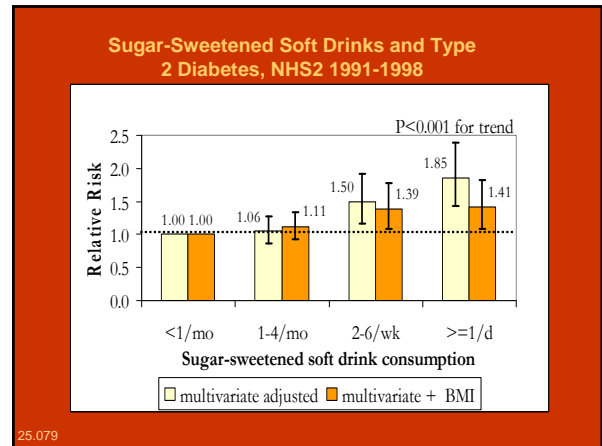
29.239a



23.042



25.107



25.079

Percentage of Type 2 Diabetes Potentially Preventable by Simultaneous Reduction of Five Modifiable Risk Factors (NHS) (Hu et al.)

Low Risk

1. Nonsmoking
2. BMI < 25
3. Moderate to vigorous exercise
4. Diet score in upper 40% (low trans fat, high cereal fiber, low glycemic load, high P:S ratio)
5. Alcohol 5+ grams/day

Percent in low risk group: 4.1%
Population attributable risk (PAR): 92% (82-96)

25.026R

Nutrition Issues in Need of Policies

1. Reduction of sugary beverages
2. Replacing refined starches & sugar with whole grains
3. Reduction of salt
4. Increases in fruits & vegetables, with modification
5. (Increases in N-3 fatty acids)
6. Reduction in portion sizes

29.241

Policy Priorities

1. Regulation of advertising to children
2. Better consumer information (food labels, restaurant menus, global food indices)
3. Enforced, high standards for foods in schools
4. Regulation of salt content of foods
5. Taxes, subsidies (e.g. tax soda, candy)
6. Standards for foods served in public institutions (a food safety issue)
7. Periodic review of DRIs (which drive DGs and school foods)

29.242

Fast Food Marketing to Children

Our fun food center has all the details of a real McDonald's! Kids cook pretend french fries in the deep fryer, ring up sales on the cash register & more...there are even sizzling sound effects! Sturdy plastic center is 39" tall; includes over 25 accessories. 2 "AA" batteries not included. Easy assembly. (3-9 years) #980 \$49.95

McDonald's® Fast Food Center

29.098

Policy Priorities

1. Regulation of advertising to children
2. Better consumer information (food labels, restaurant menus, global food indices)
3. Enforced, high standards for foods in schools
4. Regulation of salt content of foods
5. Taxes, subsidies (e.g. tax soda, candy)
6. Standards for foods served in public institutions (a food safety issue)
7. Periodic review of DRIs (which drive DGs and school foods)

29.242



Ingredients

Corn (Whole Grain Corn, Meal), Sugar, Marshmallows (Sugar, Modified Corn Starch, Dextrose, Corn Syrup, Cocoa, Gelatin, Natural & Artificial Flavor, Red 40, Blue 1, Yellow 5&6, and other Color Added), Canola and/or Rice Bran Oil, Corn Starch, Modified Corn Starch, Corn Syrup, Cocoa Processed with Alkali, Salt, Calcium Carbonate, Fructose, Carmel and Beet Juice Concentrate Color, Red 40, Yellow 5&6, Blue 1, Tricalcium Phosphate, Artificial Flavor, Trisodium Phosphate, Zinc and Iron (Mineral Nutrients), Vitamin C (Sodium Ascorbate), a B vitamin (Niacinamide), Vitamin B6 (Pyridoxine Hydrochloride), Sulfiting Agents, Vitamin B2 (Riboflavin), Vitamin B1 (Thiamin Mononitrate), a B Vitamin (Folic Acid), Peanut Flour, Vitamin B12, Wheat Flour, Vitamin E (Mixed Tocopherols), and BHT Added to Preserve Freshness.

Policy Priorities

1. Regulation of advertising to children
2. Better consumer information (food labels, restaurant menus, global food indices)
3. Enforced, high standards for foods in schools
4. Regulation of salt content of foods
5. Taxes, subsidies (e.g. tax soda, candy)
6. Standards for foods served in public institutions (a food safety issue)
7. Periodic review of DRIs (which drive DGs and school foods)

29.242

Tier 1 foods are fruits, vegetables, whole grains, and related combination products and nonfat and low-fat dairy that are limited to 200 calories or less per portion as packaged and:

- No more than 35 percent of total calories from fat.
- Less than 10 percent of total calories from saturated fats.
- Trans fat-free (less than or equal to 0.5 g per serving).
- 35 percent or less of calories from total sugars, except for yogurt with no more than 30 g of total sugars, per 8-oz portions as packaged.
- Sodium content of 200 mg or less per portion as packaged.

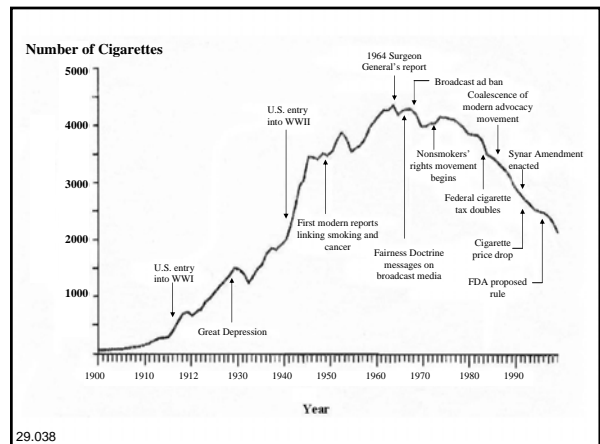
(From IOM Report, "Nutrition Standards for Foods in Schools", 2007)

29.205

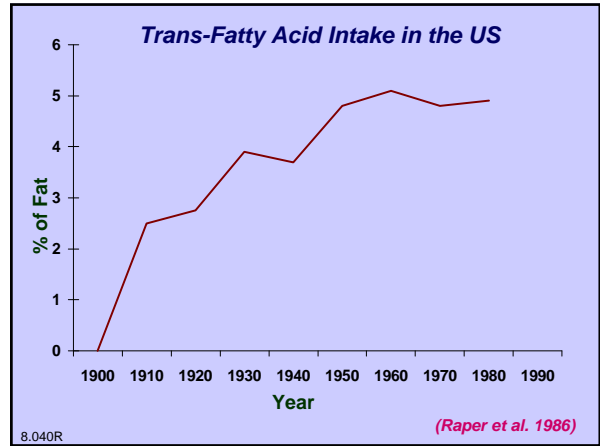
Policy Priorities

1. Regulation of advertising to children
2. Better consumer information (food labels, restaurant menus, global food indices)
3. Enforced, high standards for foods in schools
4. Regulation of salt content of foods
5. Taxes, subsidies (e.g. tax soda, candy)
6. Standards for foods served in public institutions (a food safety issue)
7. Periodic review of DRIs (which drive DGs and school foods)

29.242



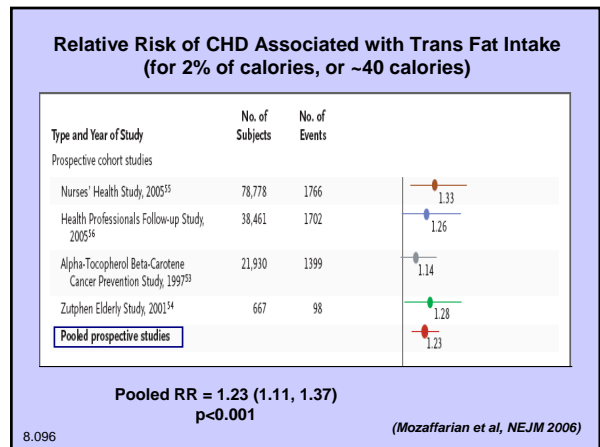
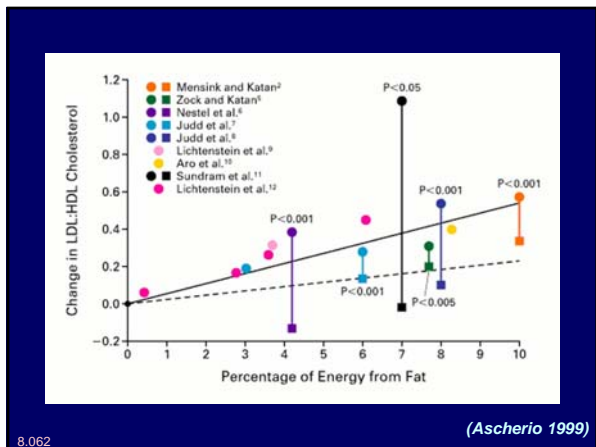
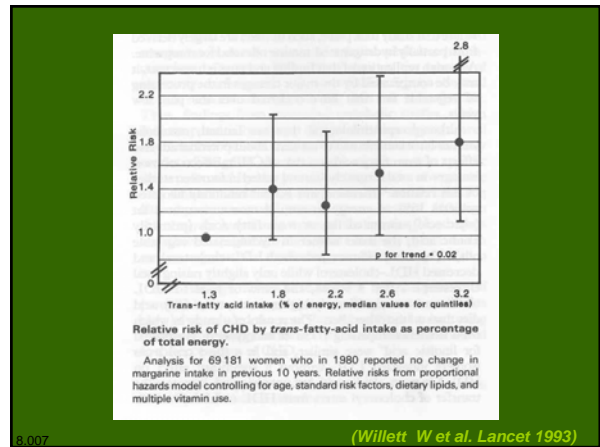
29.038



Effect of Trans and Saturated Fat (10% E) on Blood Lipids (vs Monounsaturated fat) (Mensink & Katan, 1990)

	Trans fat	Saturated fat
Total cholesterol	+6%	+12%
LDL cholesterol	+14%	+18%
HDL cholesterol	-12%	0%
LDL/HDL ratio	+29%	+18%

8.110



US FDA

- **2003** FDA rules that the trans fat must be included on food labels
- **2004** FDA Nutrition Subcommittee of the Food Advisory Committee concluded that trans fat is 'more adverse' than saturated fat with respect to coronary heart disease

8.091



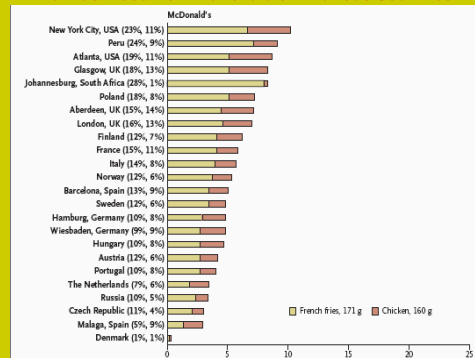
8.093

Current US Rules

1. Trans fats allowed as 'generally regarded as safe' (GRAS)
2. Partially hydrogenated rapeseed oil and menhaden oil allowed as safe approved food additives

8.087

Industrially Produced Trans Fatty Acids in a Large Serving of Fast Food from McDonald's in Various Countries



8.107

(Stender et al. 2006)

THE WALL STREET JOURNAL

The Bloomberg Diet

The nanny state reaches into the kitchen.
Saturday, December 9, 2006 12:01 a.m.

... The food nannies insist that trans fats raise cholesterol and cause heart disease. The problem, says Steven Milloy of the Competitive Enterprise Institute, is that the studies purporting to show this link are inconclusive at best. "People cite lab studies that show transient changes in blood lipids when people consume trans fats, but that's a long way from heart attacks and heart disease," says Mr. Milloy.

Walter Willett of the Harvard School of Public Health is one of the nation's leading trans fat alarmists. Earlier this year he co-authored an article in the New England Journal of Medicine that said trans fats "appear to increase the risk of coronary heart disease more than any other macroingredient."

8.106

September 17, 2007

Trans-Fat Police Find 94 Percent Compliance

By Sewell Chan



At Doughnut Plant on the Lower East Side, Mark Israel, right, with Javier Marin, has been making trans-fat-free doughnuts for a dozen years. (Photo: Richard Drew/Associated Press)

8.125

New York Times

The Boston Globe

Boston moves toward trans fats ban
Rule to take effect later this year if OK'd

By Stephen Smith and Tania deLuzuriaga, Globe Staff | January 11, 2008

8.117



Canadian Trans Fat Elimination Program

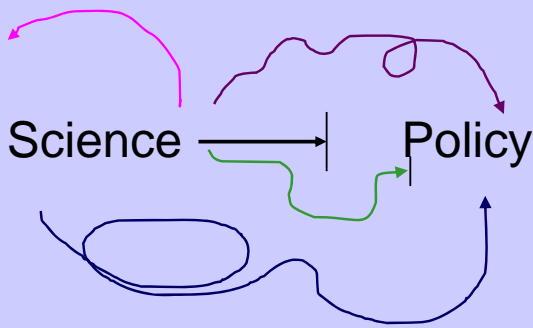
The threat of a trans fat ban!



Science —————> Policy

8.128

Science —————> Policy



8.129

Lessons:

1. Strong science is fundamental
2. Work on many fronts
3. Find good allies
4. Play good cop/bad cop
5. Divide and conquer

8.130

