

The New York City Trans Fat Regulation: Preventing Heart Disease by Changing the Food Environment

APHA - Washington, DC
November 6, 2007

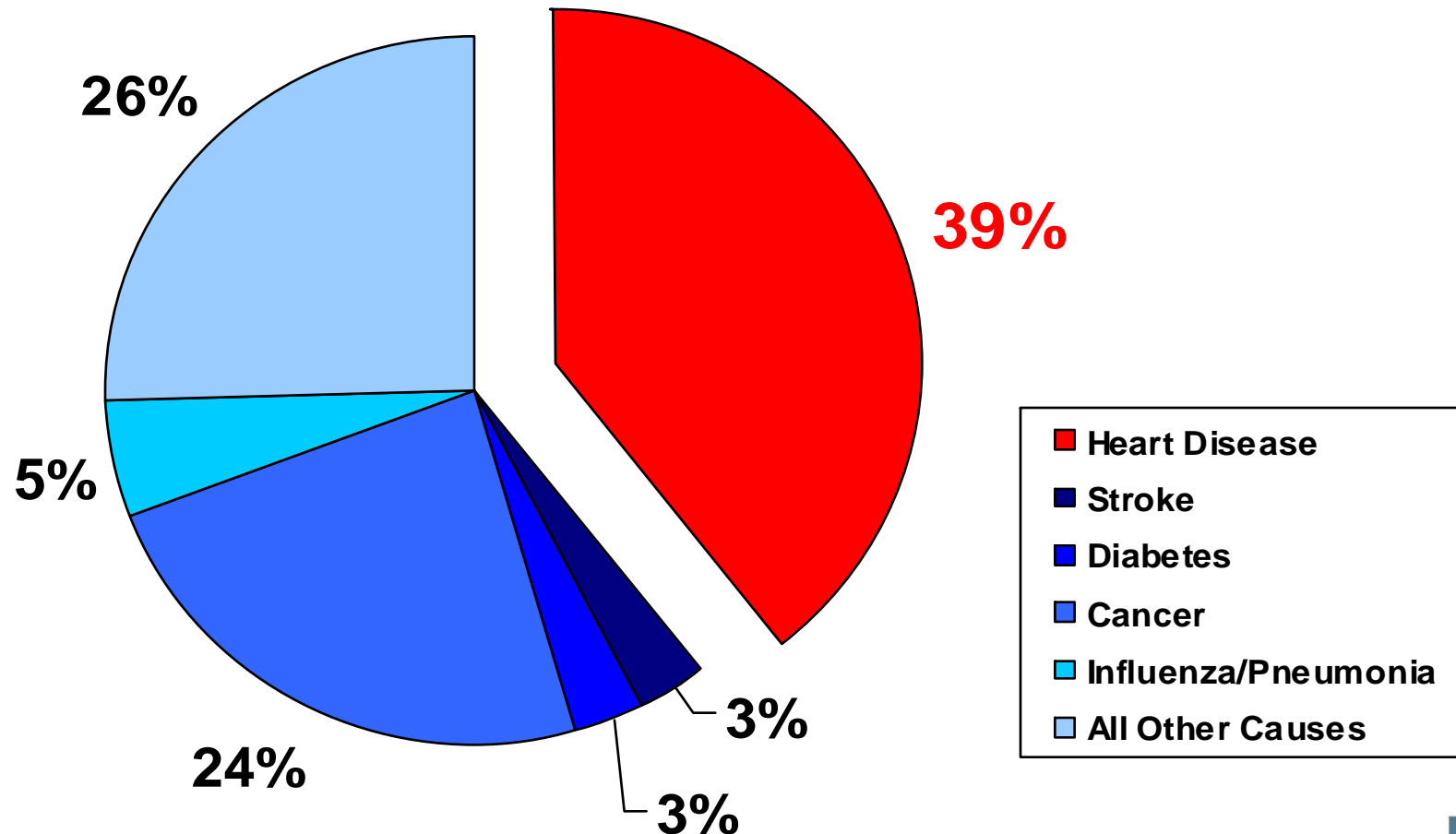
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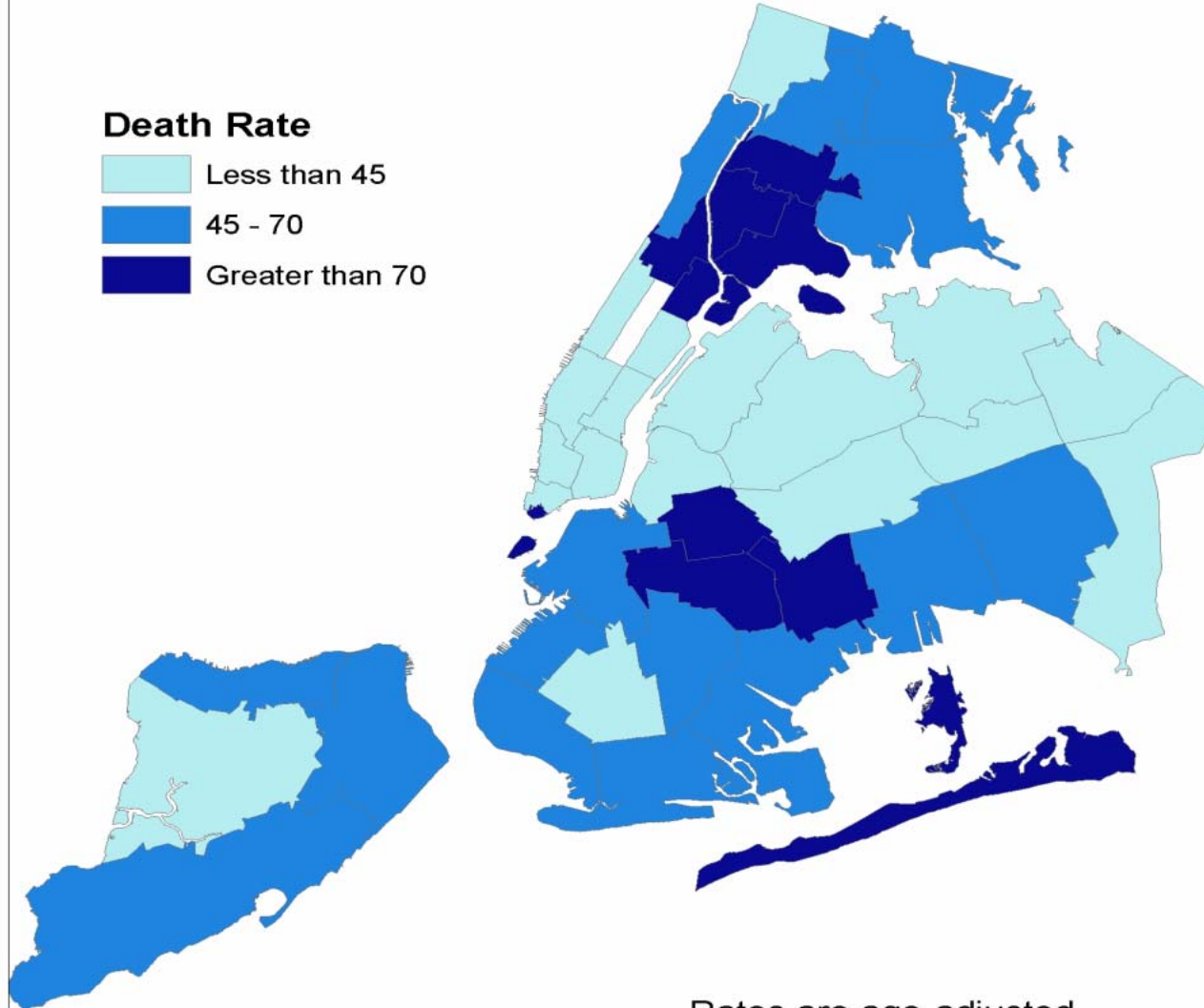
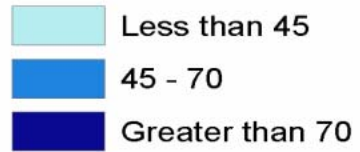
Heart Disease Is New York City's Leading Cause of Death



Source: NYCDOHMH Bureau of Vital Statistics, 2004

CVD Death Rate (per 100,000) New Yorkers, Ages < 65

Death Rate

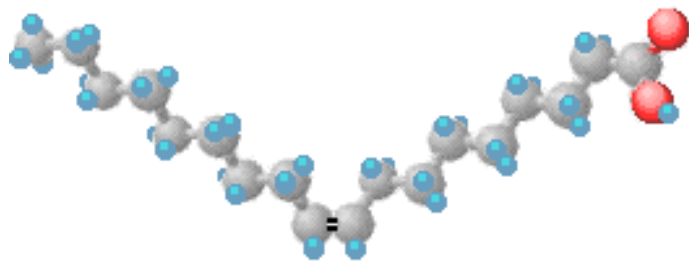


Rates are age-adjusted
Source: Bureau of Vital Statistics,
NYC DOHMH, 2002

What Is Artificial Trans Fat?

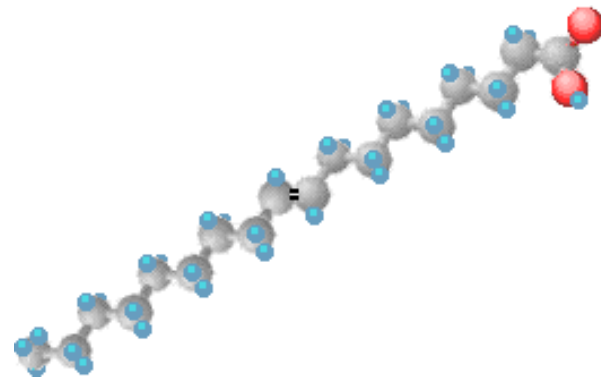
Hydrogen + Vegetable Oil = Partially Hydrogenated Vegetable Oil (“PHVO”)

Partially hydrogenated oils contain trans fat



Cis

VS.



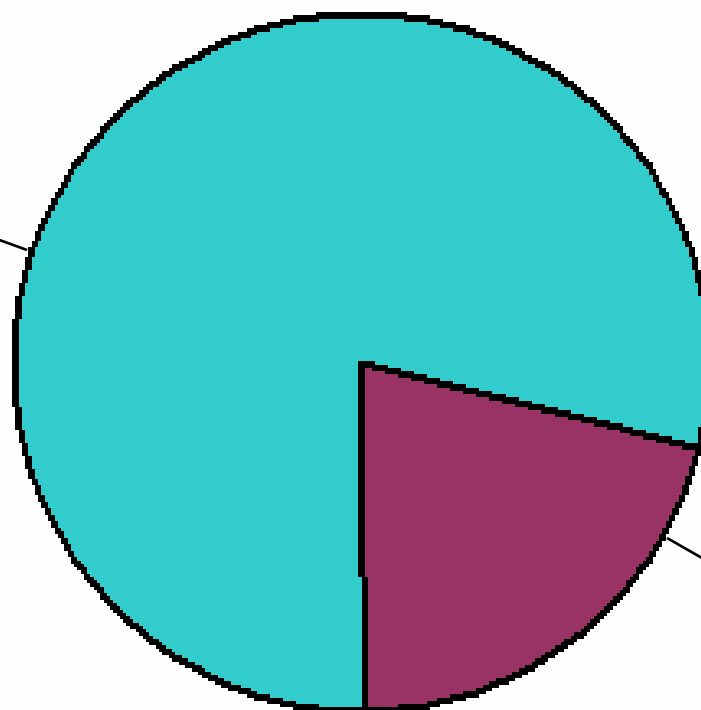
Trans

Trans Fat in the Diet

Average daily intake 2.6% of total calories
(approx 5.8 grams)

79% Artificial

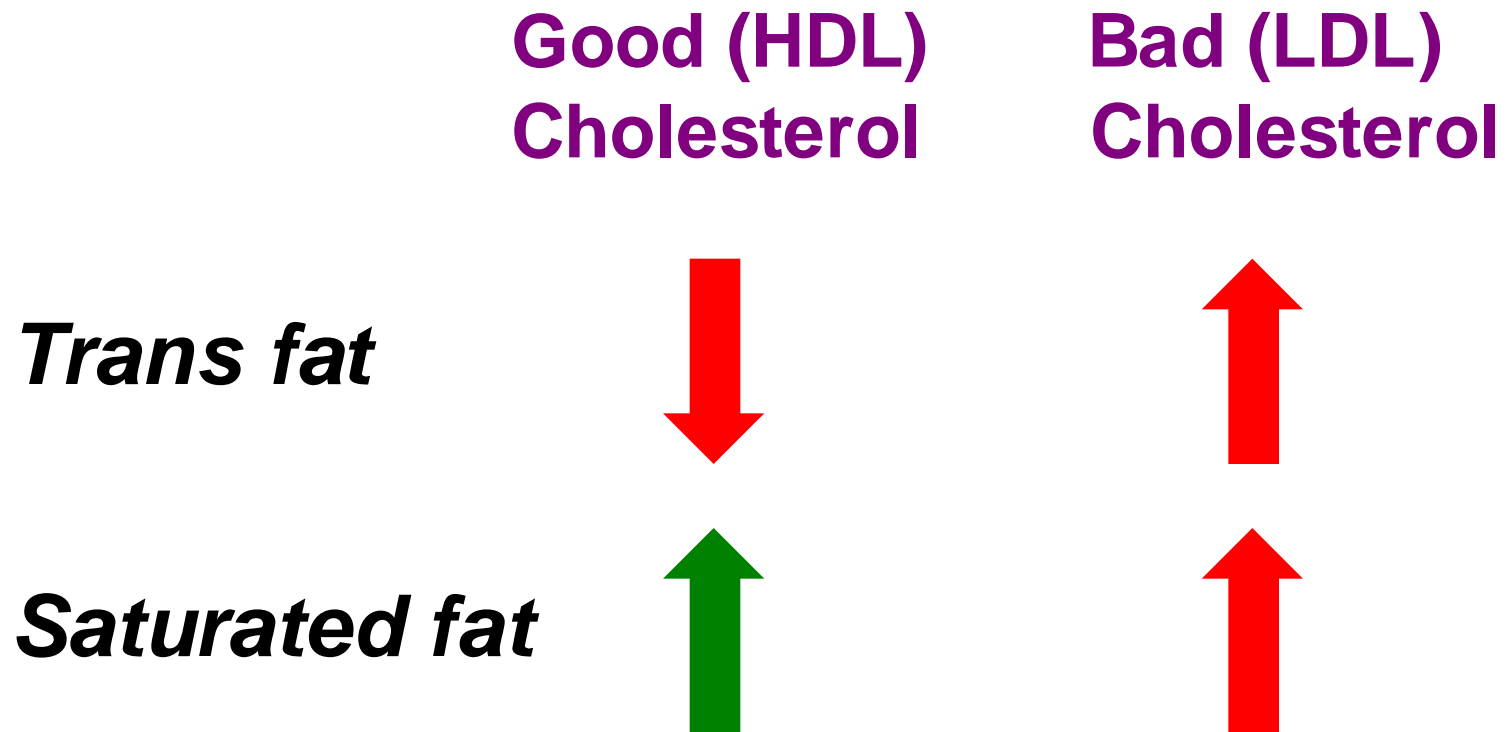
*Source:
Partially
Hydrogenated
Vegetable
Oil*



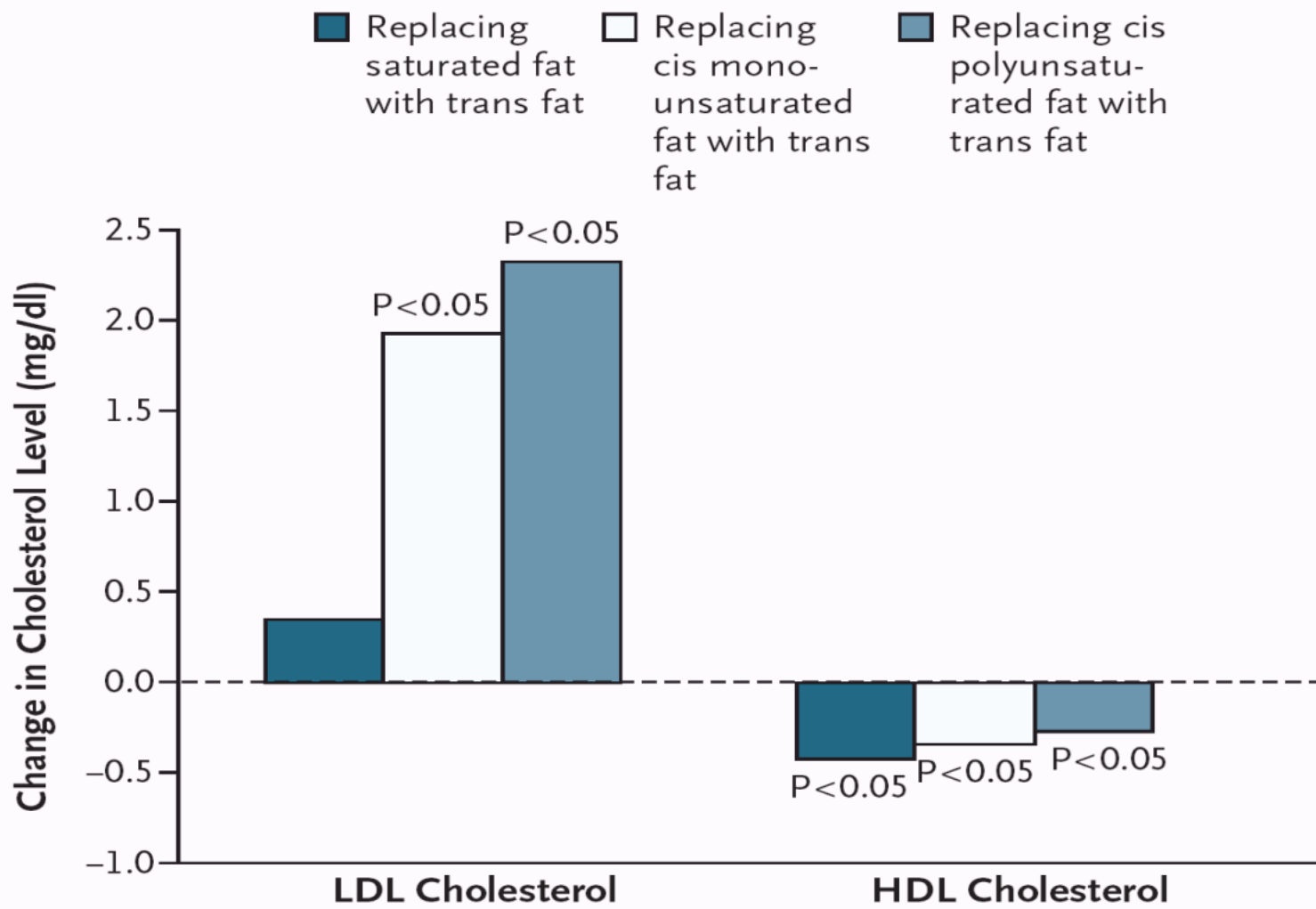
21% Naturally
Occurring

*Source:
Meat and Dairy
Products*

Trans Fat Is More Dangerous than Saturated Fat



Scientific Evidence: Replacement Studies



Source: Mozaffarian et al NEJM, 2006.

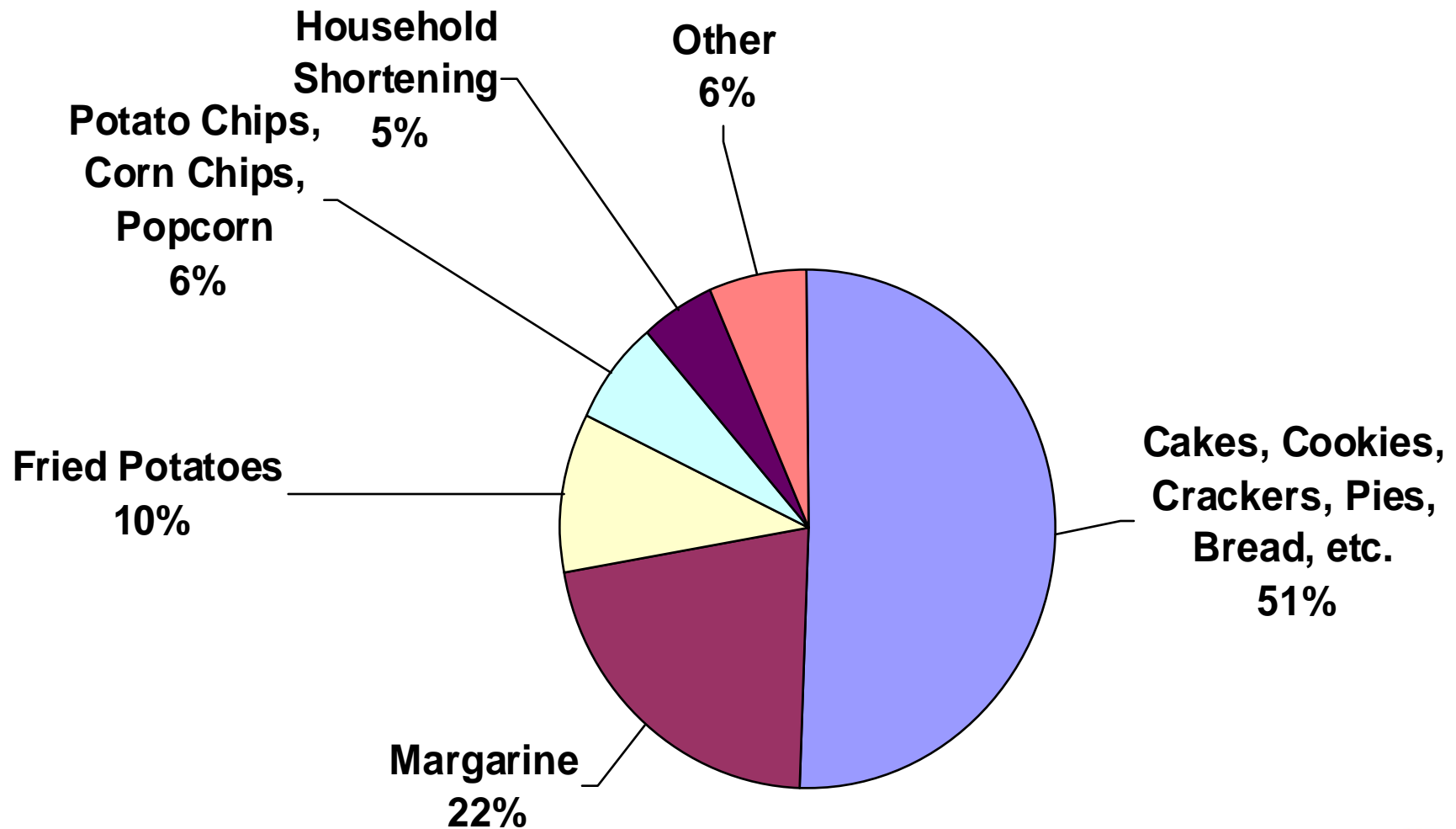
Scientific Evidence: Observational Studies

Relative risk of coronary heart disease events associated with substituting 2% of total daily energy of carbohydrates with trans fat.

Study	N	RR
Health Professionals Follow-up Study, 2005	38,461	1.26
Alpha-Tocopherol, Beta-Carotene CA Prevention Study	21,930	1.14
Nurses' Health Study, 2005	78,778	1.33
Zutphen Elderly Study	667	1.28
Above studies, pooled	139,836	1.23

Data source: Mozaffarian et al NEJM, 2006.

Major Food Sources of Artificial Trans Fat for U.S. Adults



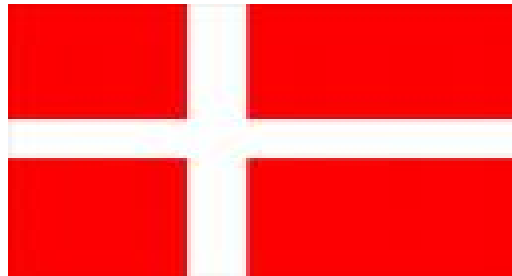
Data Source: http://www.fda.gov/fdac/features/2003/503_fats.html

Leading health organizations agree that trans fat intake should be strictly limited

- Institute of Medicine 
- U.S. Department of Agriculture 
- American Heart Association 
- World Health Organization 

Denmark: 1st Country to Restrict Trans Fat

- March 2003: Denmark issued new regulations limiting the amount of trans fat in all industrially processed foods.
- Processed food can only contain **2% of trans fat for every 100 grams of fat.**



Labeling in US Supermarkets, 2006

Starting in January 2006

Prior to January 2006

Ingredients:

Liquid Corn Oil, Partially Hydrogenated Soybean Oil, Salt, Vegetable Mono And Diglycerides And Soy Lecithin (Emulsifiers), Sodium Benzoate (To Preserve Freshness), Vitamin A Palmitate, Colored With Beta Carotene (Source Of Vitamin A), Artificial Flavor, Vitamin D3

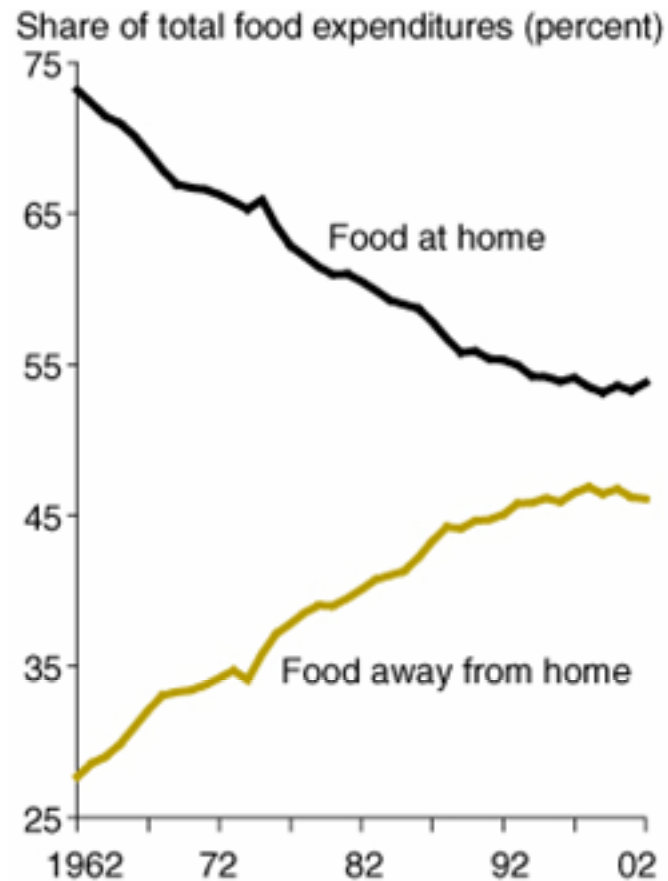
Nutrition Facts			
Serving Size 1 cup (228g)			
Servings Per Container 2			
Amount Per Serving			
Calories 260		Calories from Fat 120	
		% Daily Value*	
Total Fat	13g		20%
Saturated Fat	5g		25%
<i>Trans</i> Fat	2g		
Cholesterol	30mg		10%
Sodium	660mg		28%
Total Carbohydrate	31g		10%
Dietary Fiber	0g		0%
Sugars	5g		
Protein	5g		
Vitamin A	4%	•	Vitamin C 2%
Calcium	15%	•	Iron 4%
* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs:			
	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g
Calories per gram:			
Fat	9	•	Carbohydrate 4
			• Protein 4

Trans Fat Still Invisible in Food Service

- Food labeling led to massive reformulation of grocery store products by 2006
- **BUT**...restaurants & bakeries continued to *widely use* products containing trans fat



People Are Eating Out More



Source: Food Consumption (Per Capita) Data System, USDA, Economic Research Service.

VEGETABLE OIL

INGREDIENTS PARTIALLY HYDROGENATED SOYBEAN OIL, CORN OIL, TBHQ AND CITRIC ACID (ADDED TO HELP PRESERVE FRESHNESS), AND DIMETHYL POLYSILOXANE (ADDED AS AN ANTIFOAMING AGENT).

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PRODUCT OF USA
AGRICULTURA OROTH
NACIONAL OROTH
54812/ 0334AUG-1220

(00) 0 0435598 002589018 1



USE THRU

NET WT: 35 LBS

Trans Fat Education Campaign 2005-2006

Survey:

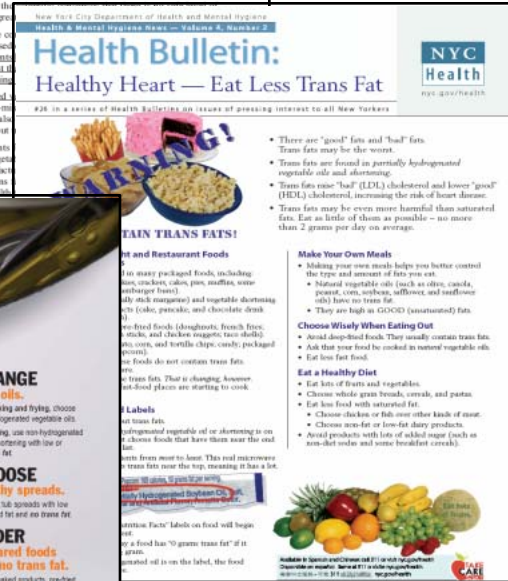
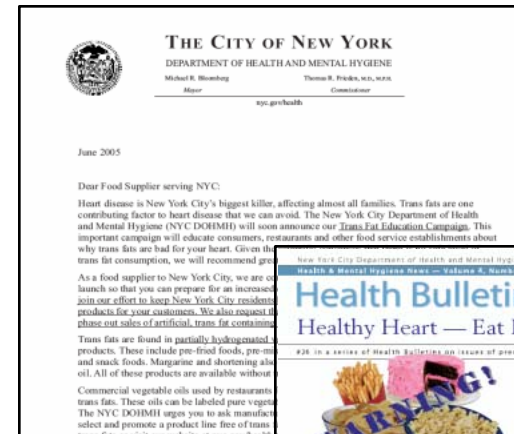
- Prevalence of use pre- and post-intervention

Materials distributed to:

- 200,000 to consumers
- 15,000 to distributors
- 30,000 to restaurants and other FSEs

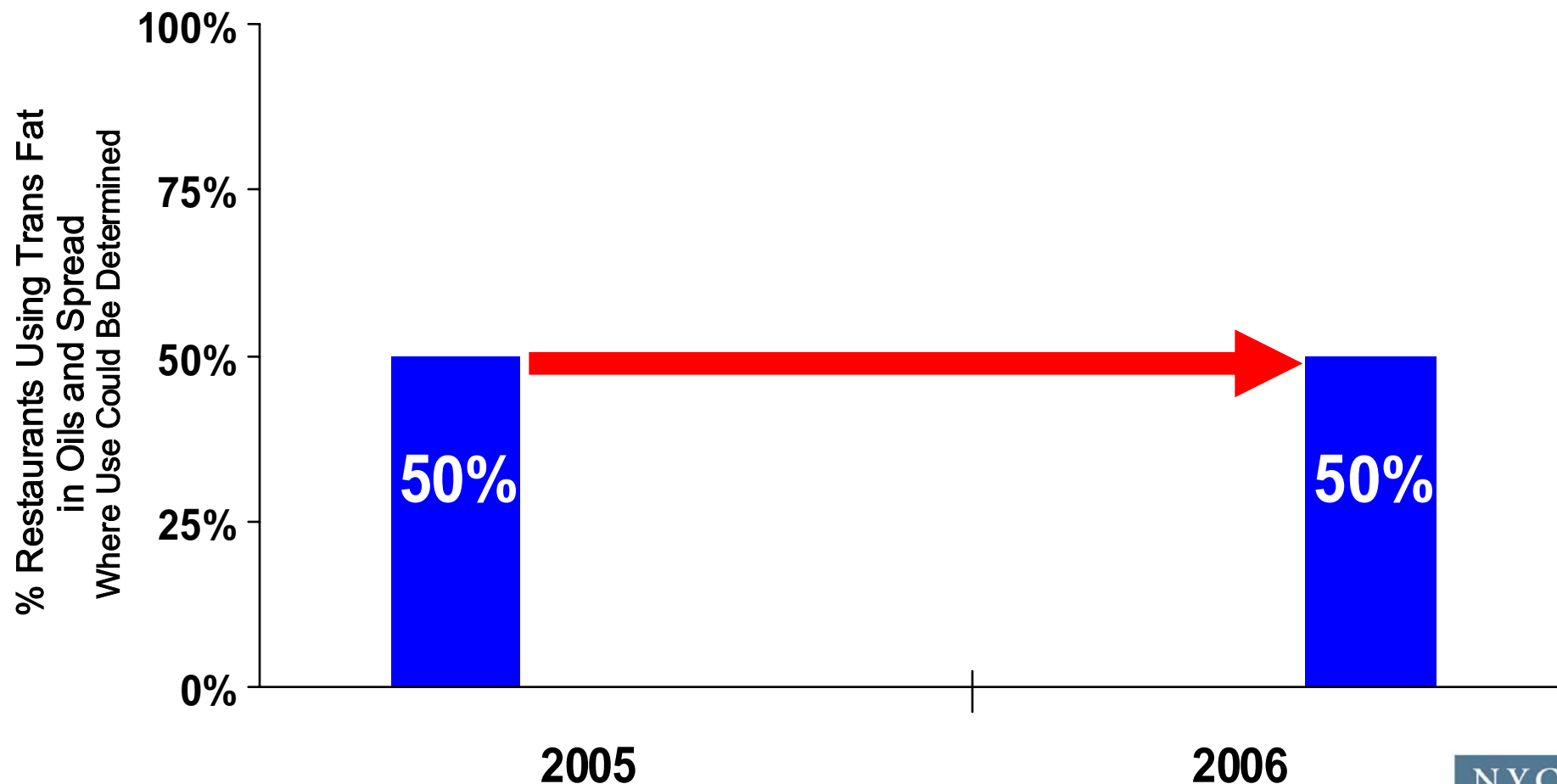
Also...

- Trans fat module in food safety courses
- Information on inspection reports



Voluntary Campaign Proved To Be Ineffective

% of Restaurants Known to be Using Trans Fat in Oils and Spreads

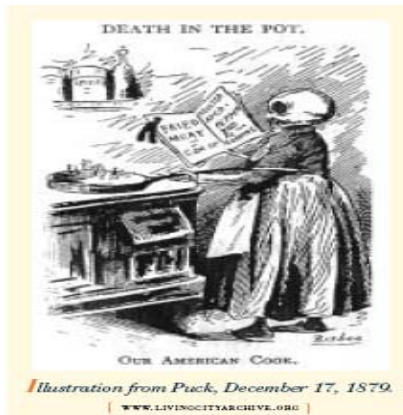


Like lead in paint, it's invisible, dangerous, unnecessary and won't be missed

- Unavoidable in Restaurants: No way to know the trans fat content of food
- Replaceable: Artificial trans fats are fully replaceable
- Feasible: Phasing out trans fat is a feasible environmental policy to reduce heart disease in New York City

Why should a local health department address this?

As overseer of NYC's Health Code, the Board of Health has enacted countless measures to improve the well-being of New Yorkers over the years – including the nation's first ban on interior lead paint, modern tuberculosis control provisions and, more recently, a plan for eliminating trans fat from restaurants.



NYC Board of Health: A History of Regulating the Food Environment

18708

Commissioner Chandler
appoints first milk inspector,
opens laboratory

1884

Department creates
Division of Food Inspection
and Offensive Trades

1907

“Typhoid Mary” is traced,
confined at North Brother
Island

Sept 26th 2006 Board of Health: Proposal to Partially Phase-Out Artificial Trans Fat

- Proposed restriction of trans fat to be phased in over 18 month period
- Food served in manufacturers' original packaging will be exempt
- Applies to all NYC restaurants and mobile vending commissaries



New York Calls In the Food Police

(TRANS) FAT CITY

Trans Fat Nation

NEW YORK POST

TRANS FAT A DUNKIN' DON'T

There's No Such Thing As Bad Press

Stossel: Trans Fat Ban Is 'Nanny State' Intrusion

Many Politicians Would Rather Restrict Our Freedoms Than Improve Our Lives

They're All Bad for You, but Should They Be
Illegal?

Doughnuts in danger? NYC may ban trans fats

Health officials unveil proposal to bar substance in restaurants

Farewell, French Fries! Hello, Sliced Apples!

Summary of Comments and Testimony

- Written comments received: 2,287
- Public hearing participants: 53
- Total support: 2,266
- Total opposition: 74
- Ratio PRO to CON: 31:1

Supporters: National Health Organizations

- American Medical Association
- American College of Cardiology
- American Cancer Society
- American Diabetes Association
- American Academy of Pediatrics
- National Hispanic Medical Association

Supporters: State and Regional Health Organizations

- American Society of Hypertension - Eastern Regional Chapter
- Empire State Medical Association (New York State Affiliate of the National Medical Association)
- Medical Society of the State of New York
- New York Academy of Medicine
- NYS Chapter American College of Cardiology
- NYS District of the American Academy of Pediatrics (AAP)

Supporters:

Selected Local Organizations

- Albert Einstein College of Medicine
- Campaign for Bronx Health
- Columbia University Medical Center
- Columbia University's Mailman School of Public Health
- Community Health Care Association of New York State (CHCANYS)
- Community Healthy Care Network
- East Harlem Partnership for Diabetes Health and Prevention
- GHI
- Harlem Hospital Center
- Harvard School of Public Health
- Institute for Urban Family Health
- Montefiore Medical Hospital
- Morris Heights Health Center
- Mount Sinai School of Medicine
- New York Downtown Hospital
- New York University School of Medicine
- North General Hospital
- Primary Care Development Corporation (PDCD)
- Public Health Association of New York City
- Staten Island University Hospital

Concerns Raised in Public Comments and Testimony

- Health Impact
- Regulatory Strategy
- Feasibility

Regulation

July 1, 2007: oils, shortening, and margarine used for frying or as a spread must have with less than 0.5 grams of trans fat per serving.

- Oils and shortening used to fry yeast dough and cake batter must comply with the second deadline.

July 1, 2008: all foods must have less than 0.5 grams of trans fat per serving.

- Food served in manufacturers' original, sealed packaging will be exempt

Technical Assistance to Restaurants and Bakeries

- **Helpline** staffed by recognized culinary science experts
- **Website** www.notransfatnyc.org
- **Training** for restaurant personnel
- **Materials**, including a product resource list, brochures & case studies
- All available in multiple languages

WELCOME TO THE TRANS FAT HELP CENTER

The Source For New York City Food Service Establishments



Are you a New York City food professional who wants to learn more about replacing artificial trans fat?

ASK US

Do you have questions about the new trans fat regulations?

WE HAVE ANSWERS



We're here to help you substitute partially hydrogenated oils and shortenings with something better—products that will keep your customers healthier, and coming back for more. Read on, or call us.

Enter Site:

English

Español

中文

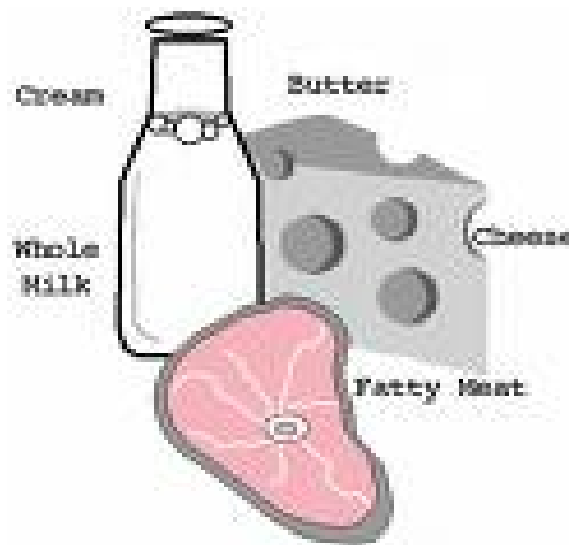


Challenges

- Topic was 'new' to consumers & public health professionals
- Voluntary approach was not successful
- Needed to learn about oil industry and food production
- Widespread false perceptions about restricting food choice

Challenge: Keep Saturated Fat Down

- Most trans fat replaced by healthy oils for frying and spreads
- **BUT** baking requires some saturated fats...key challenge is minimizing saturated fats while preserving quality.



Strengths

- Projected significant impact on the **#1** cause of death
- Strong evidence base
- Preceded by voluntary effort
- Evaluation & enforcement utilized existing DOHMH infrastructure
- Regulation: Health Code Amendment via Board of Health
- Policy Design:
 - Changes the “default”
 - Benefits all citizens

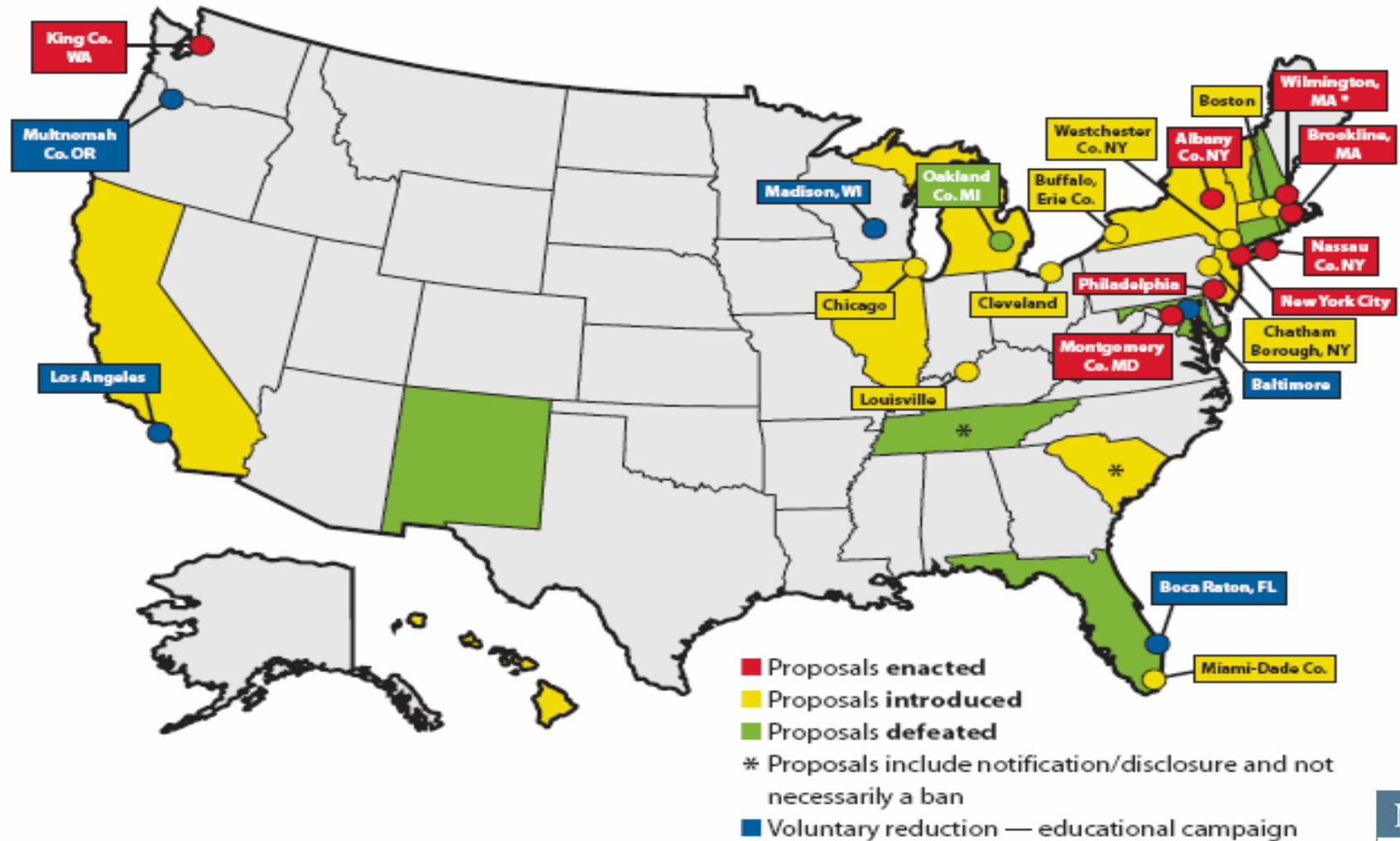
Trans Fat Restriction: Success!

- Approximately **1,500 inspections** were completed from July 1 -28th. **95%** of FSEs inspected during this period were in compliance with the first phase of NYC's regulation (frying & spreads.)
- Violations were largely due to failure to order new products, particularly margarine replacement, and not due to technical difficulties with product reformulation or supply issues.

Trans Fat Regulation Spread

STATE & LOCAL TRANS FAT PROPOSALS

As of 9/18/07



Shifting to a Healthier Food Environment

NYC's Approach to the Problem:

**Make healthy food the default, a not a
niche**

“Healthy food” vs. “health food”



We need a new concept of food safety for the 21st Century

- Traditional Concern: Food contamination, unsanitary practices
 - Today: Foodborne Pathogens still cause **5,000 deaths** annually in the US and it is still a key concern
- But the food industry has been tremendously successful in reducing the burden of foodborne pathogens

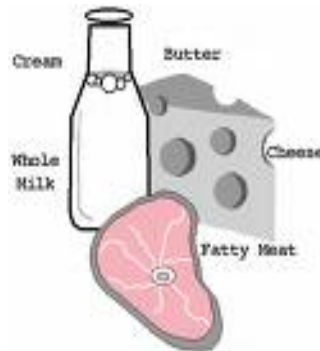
1906
Department begins inspection of dairies



"I DRINK TO THE GENERAL DEATH OF THE WHOLE TABLE."

We need a new concept of food safety for the 21st Century

- Today: Food is a major contributor to disease, but primarily through the ingredients that are supposed to be in it, not the bugs that aren't.



The New Food Safety:

- Making healthy food widely available and affordable
- Nutrition Labeling
- ***Improving the Nutritional Profile of Foods {trans fat, sodium, saturated fat & added sugar}***
- Reducing the Sale of Unhealthy Foods
- Portion Size Reduction



Good Health
Good Taste
No Artificial Trans Fat

Your ❤️ Will
Thank You

