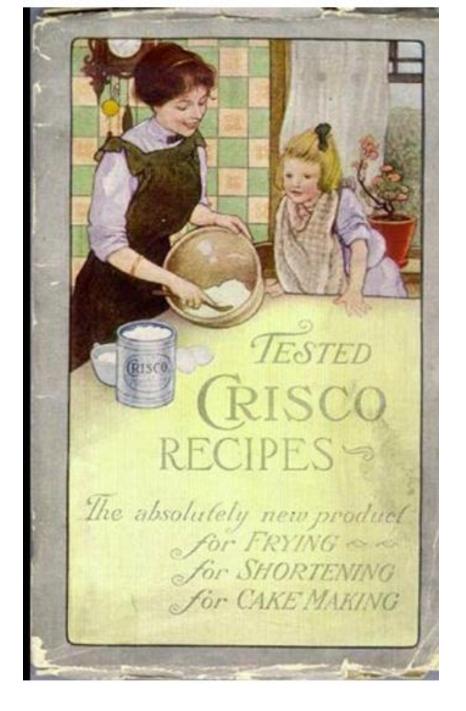
### **Nutrition Policy Update**

January 10, 2014





- 1911 Crisco offers the first hydrogenated oils
- P&G took advantage of excess
  - cottonseed oil from candlemaking industry
  - Soybean oil
  - Corn oil
- Marketing campaigns included cooking classes, demonstrations



## Dairy rationing in WWII increased the popularity of shortening



 Am J Public Health Nations
 Health. 1959
 September; 49(9):
 1120–1128.

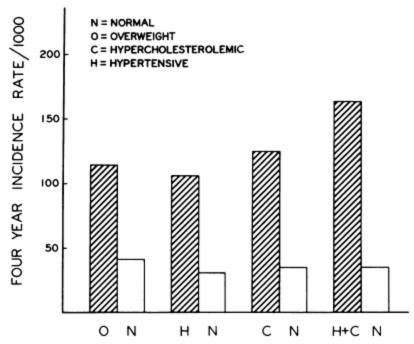
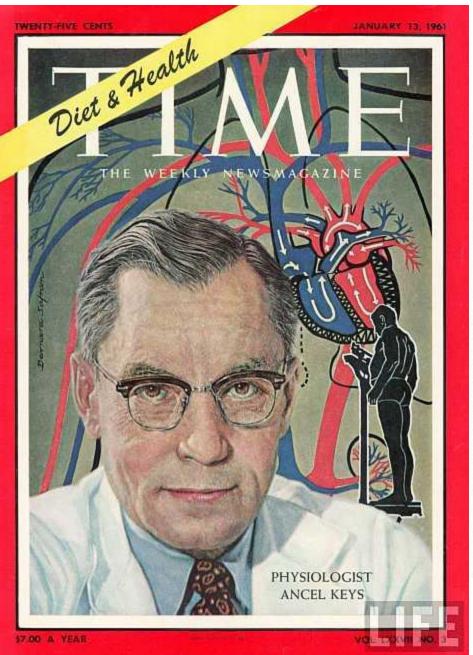
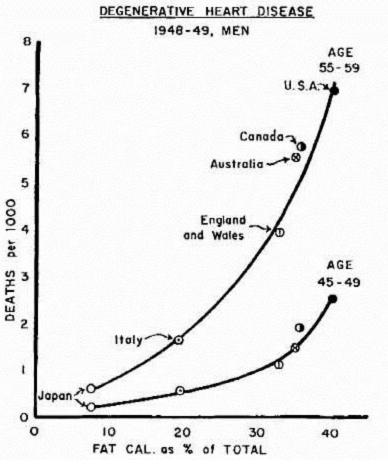


Figure 3—Incidence of Coronary Heart Disease in Relation to Overweight, Hypertension and Hypercholesterolemia.

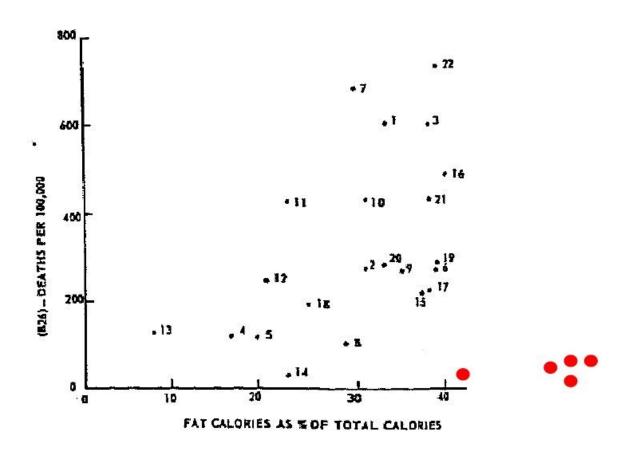
Hypertension = 160/95 or more; hypercholesterolemia = 260 mg per cent or more; obesity = Framingham relative weight of 113 or more, i.e., 113 per cent or more of the median weight of the Framingham sample. After Dawber, Moore, and Mann. A.J.P.H. Part 2, 47, 4:4-24 (Apr.), 1957.

teins can be considered the agent for atherosclerosis, all other factors known to be involved may be viewed to deterciates<sup>29</sup> found in their prospective study of 4,469 inhabitants of middle age in Framingham. Mass., that hypercholes-





#### The original evidence....



# Science finds Corn Oil rich in "L-plus" factor!

Of all leading U.S. Brands

only Mazola is Pure Corn Oil

New discoveries about corn oil are giving doctors a new approach to an old problem...that of controlling blood cholesterol levels...which is considered particularly important in both the prevention and treatment of heart disease.

When Mazola Corn Oil is included in daily meals, control of blood cholesterol can frequently be accomplished without drastic restrictions in the diet.

Every well-balanced diet includes carbohydrates, proteins and fats, along with adequate amounts of vitamins and minerals. Many nutritionists now suggest that one-third to one-half of the fat we eat should be the unsaturated ("L-plus"—rich) vegetable oil-type, particularly when cholesterol control is a problem.

Mazola Corn Oil, rich in the "L-plus" factor, is excellent for this purpose. Your everyday meals can readily contain an adequate amount of Mazola Corn Oil. Just use Mazola on salads, in cooking and frying ...as a shortening. Mazola is good—and good for you!

What is the "L-plus" factor?

The desirable effect of corn oil in decreasing the amount of cholesterol in the blood has now been demonstrated repeatedly.

Doctors believe that the nat-

Doctors believe that the natural substances present in corn oil bring about this desirable effect. For brevity, we call the combination of these substances (including Linoleates) the "L-plus" factor. Mazola Corn Oil has a very high "L-plus" factor content.

Since the body cannot make the complete "L-plus" factor, it should be provided regularly in daily meals.



from the heart

of golden

corn



2. A total of  $1\frac{1}{2}$  oz. (45 ml.) of vegetable oil rich in polyunsaturated fatty acids should be consumed daily. Most patients prefer to use about ½ oz. in food preparation and consume a minimum of 1 oz. of the oil at the table each day. This may be used in salad dressings and on vegetables, emulsified in milk, or added to cereals or soups. In addition, you may use a 10-Gm. pat of a recommended margarine rich in liquid vegetable oil daily as a table spread. When a solid fat is preferred in cooking or baking, use a recommended margarine rich in liquid vegetable oil, preferably one with a P/S ratio of 1.5 or higher. Never use the conventional partially hydrogenated types of margarines, cooking fats, or butter. Do not reuse and do not heat it to the smoking point.

3. Do not eat the following: butter, cream, whole milk, and ice cream; conventional partially hydrogenated margarine, shortening,

ommended margarine or shortening riliquid vegetable oil\*; in place of creat an emulsion of a vegetable oil rich in unsaturated fatty acids.

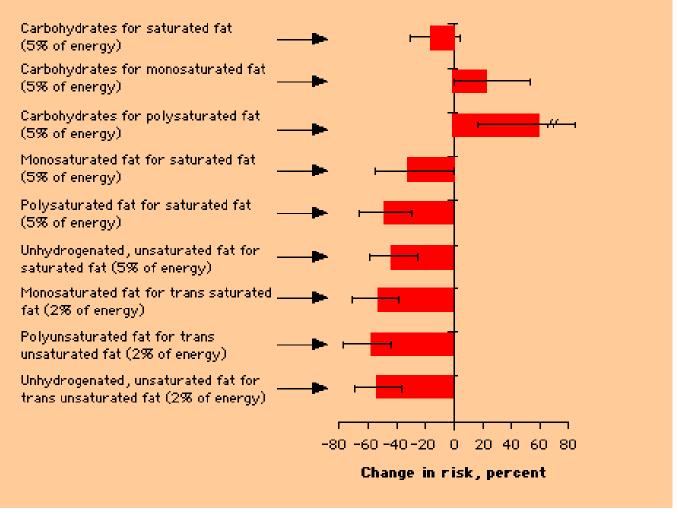
4. Balance the diet by consuming ade amounts of vegetables, fruits, nuts, l and cereals.

More than 4 years' experience with than 600 men and their wives shows the lowing to be the most common difficultic countered by our subjects in adhering "Prudent Diet": 1. Giving up pastries a high content of saturated fat, such as ish pastry, coffee cake, pound cake, "pecake, cookies, and pies. This prohibition real deprivation for many people and the most frequent difficulty. These profiles

need not be prohibited for the person

wife is willing to make them with veg

<sup>\*</sup>Solid shortenings rich in liquid vegetable not, at this writing, available for use by the public.



**Risk of coronary heart disease in women is reduced by the intake of mono and polyunsaturated fat** In an analysis from the Nurses' Health Study, which involved 80,082 women, the risk of coronary heart disease was reduced when intakes of saturated fat and trans saturated fat were replaced by mono and polyunsaturated fat. Lines represent 95 percent confidence intervals. (Data from Hu, FB, Stampfer, MJ, Manson, JE, et al. N Engl J Med 1997; 337:1491.)

## 20 year campaign to remove it from food supply



- CSPI petitions for label 1994
- IOM recommends "little as possible" 2002
- 2006 foods labelled
- Broken McPromise
- Sue KFC 2006
- NY, CA pass laws limiting restaurant use 2007
- Walmart requires suppliers to phase out by 2015

## How the transfat debate helps us to understand nutrition policy

- Industrial, medical, and consumer interests are in competition
- Science was leveraged and compromised by industry
- Advocacy groups acted prematurely based on emergent science.
- Correcting the problem took decades of advocacy

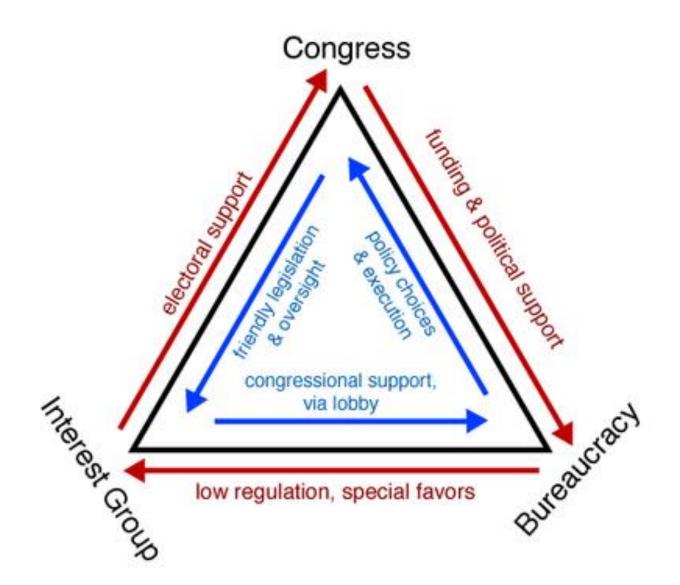
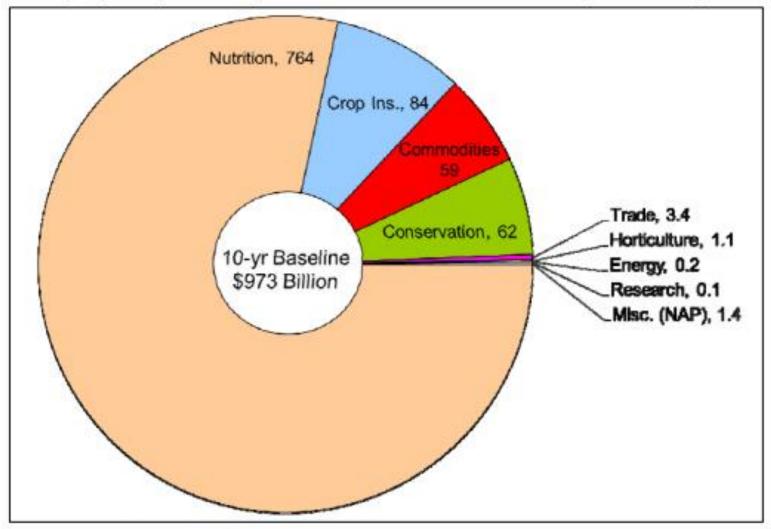


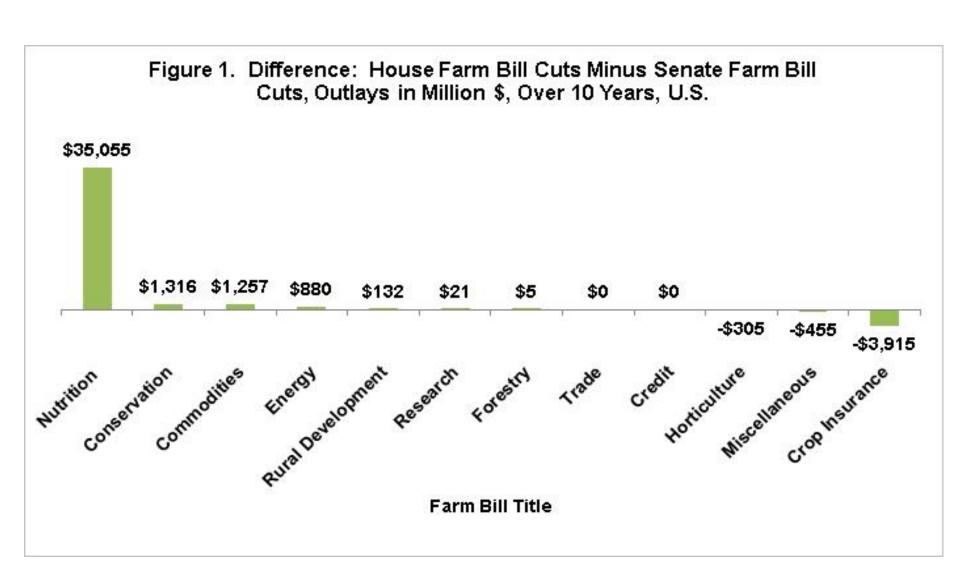
Figure 2.Ten-Year Mandatory Baseline for Farm Bill Titles

(10-year expected outlays FY2014-FY2023 in billions of dollars by farm bill title)

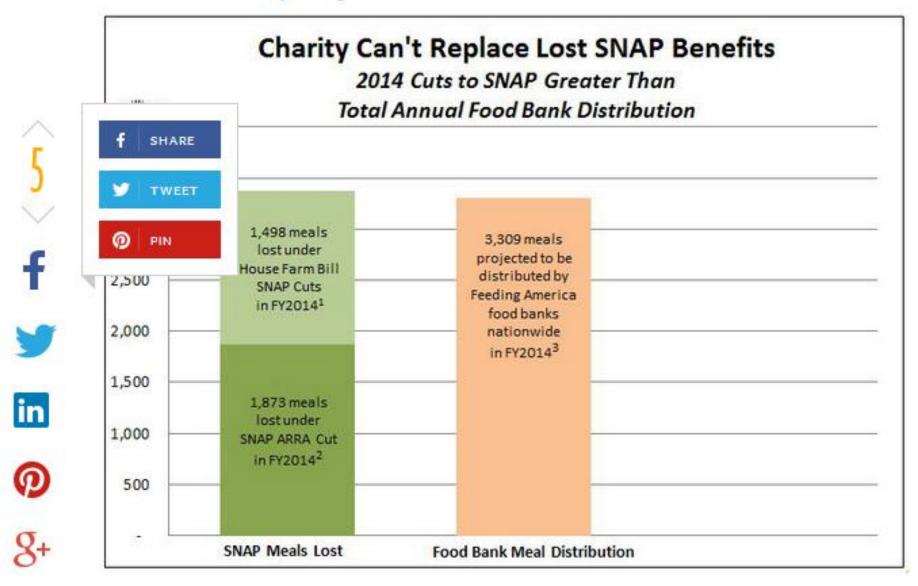


Source: CRS, using the May 2013 CBO baseline.

#### US Farm Bill Debate of 2013



not have the capacity to meet their needs.

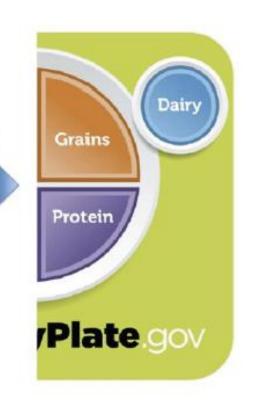




\$4.3 billion spent on specialty crops

fruits nuts vegetables \$33.1 billion spent on commodity crops

corn soybeans cotton rice wheat



### Who is receiving farm subsidies?



Microsoft, Anschuz Entertainment, Chik-Fil-A, Amway, DISH Network Cox Enterprises, Estee Lauder, Charles Schwab, Wal-Mart, Victoria's Secret

#### What's next?

- Conference committee elected to delay debate for a few months and extend farm bill
- Conference committee is debating the two bill versions. They can:
- Come up with a compromise and get both chambers to pass
  - Not come up with a compromise
    - 2007 farm bill extended for 1 or 2 years

### Child Nutrition: Healthy Hunger Free Kids Act

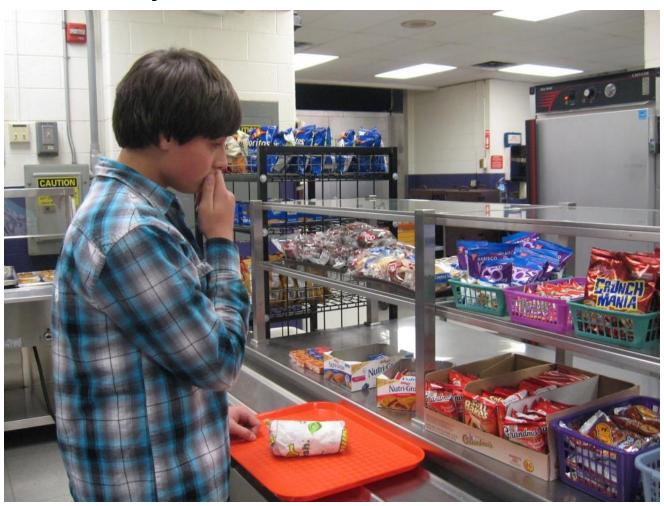
- Required updated rules for school meals and competitive foods
- Research on child hunger

### Competitive Foods Regulations

Foods sold outside meals programs



### Competitive Foods Rules

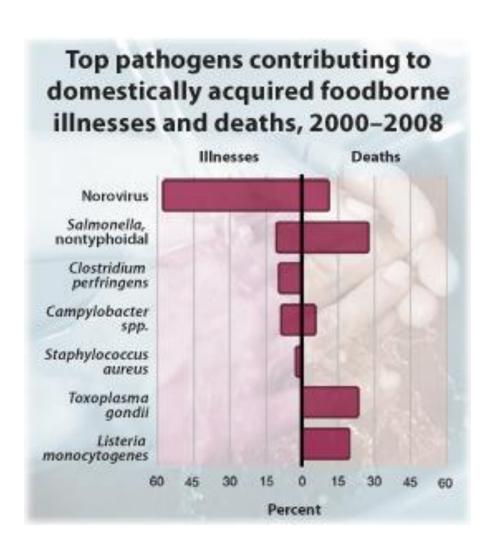




#### New standards say:

- Snacks have to be:
  - Fruit or vegetable
  - Or offer at least 10% of DV of C, K, D, or fiber
  - <35% fat, <35% sugar</p>
  - No more than 200 kcals/portion
- Beverages have to:
  - All schools sell plain water, plain low fat milk, flavored milks, and milk alternatives (8 oz/12 oz)
- A la carte sales of foods in school meal are allowed to be sold
  - Pizza, hamburgers, corndogs can be sold (<350 kcals)</li>
- Only during school day
- Each district defines how limited this will be based on loophole
  - Foods sold as fundraisers are not subject to standards

#### Food safety modernization act



#### 10 biggest foodborne illness outbreaks

- Canteloupe and listeria (29 deaths)
- Ground turkey and salmonella (1 death, 111 infections)
- Eggs and salmonella (1600 illnesses)
- Celery and listeria (4 deaths)
- Peppers and salmonella (2 deaths, 1442 infections)
- Peanut butter and salmonella (9 deaths)
- Spinach and e-coli (230 infections)
- Tomatoes and salmonella
- Deli turkey and listeria (8 deaths, 54 infections)

### Food safety modernization act

- Produce rule
  - Safe and clean water (farmer responsible)
  - Limiting biological ammendments (compost)
  - Handwashing, sick days
  - Limiting contact with animals
  - Clean buildings
  - Sprouts treatment

#### Food Safety Modernization Act

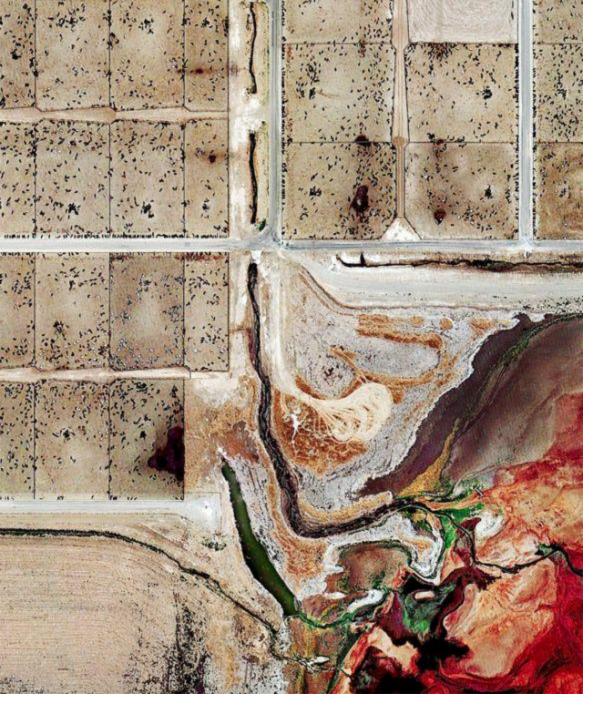
- Prevention Controls Rule for processors
  - Plan with hazard analysis, preventive controls, monitoring, corrections, verification
  - 99.5% of all facilities affected are small businesses/farms
  - Could be applied to direct-to-consumer operations

### Why are chickens and turkeys contaminated?



#### Why are produce fields contaminated?

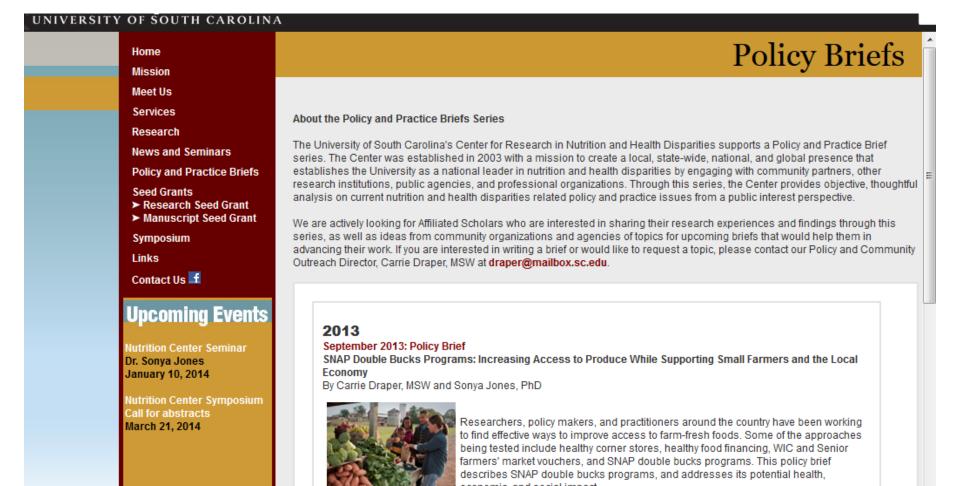




- In the courts:
- Freedom of speech suits because of "Ag Gag Laws" in Agricultural States

## Want more information about nutrition policy issues?

http://nutritioncenter.sph.sc.edu/policy.shtml



## Come to the Healthy Eating in Context Symposium: Abstracts due Jan 17!

http://nutritioncenter.sph.sc.edu/symposium.
 shtml

