

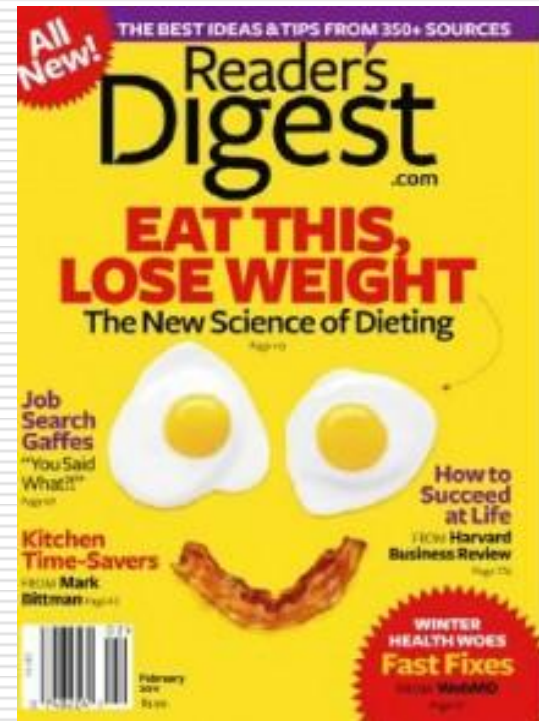
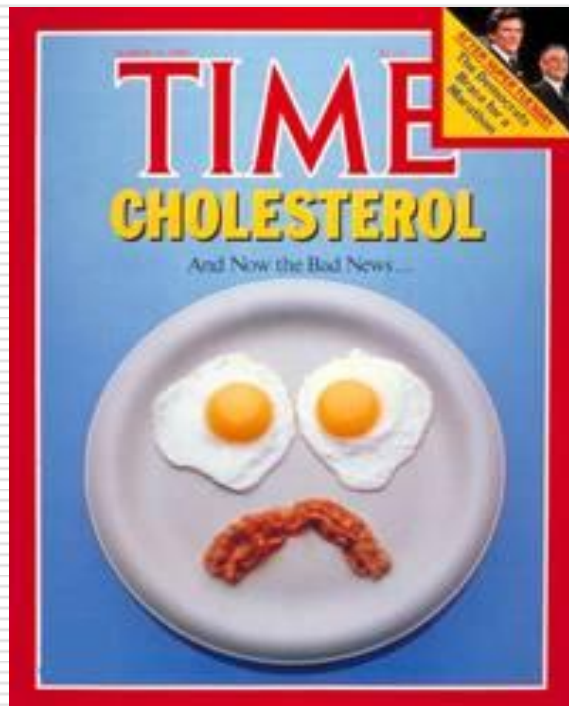
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**Thanks for supporting  
clean fresh Raw Milk and  
the farmers who produce it.**

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# The Shift Is Coming





# Back to High Fat

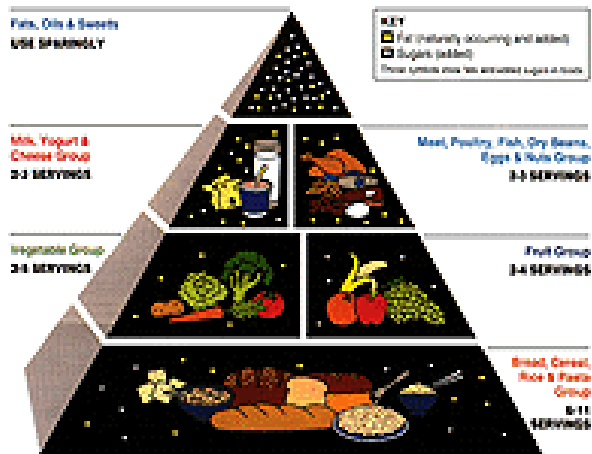
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# **2015: The Low Fat Wall is Coming Down!**



# Record levels of chronic disease associated with Low Fat (1961-2010)



CDC: 1 in 3 children born since the year 2000 will become diabetic...

---



**Fat kids  
will die  
younger**



low fat = a swamped canoe...



# U.S. 37<sup>th</sup> In Life Expectancy

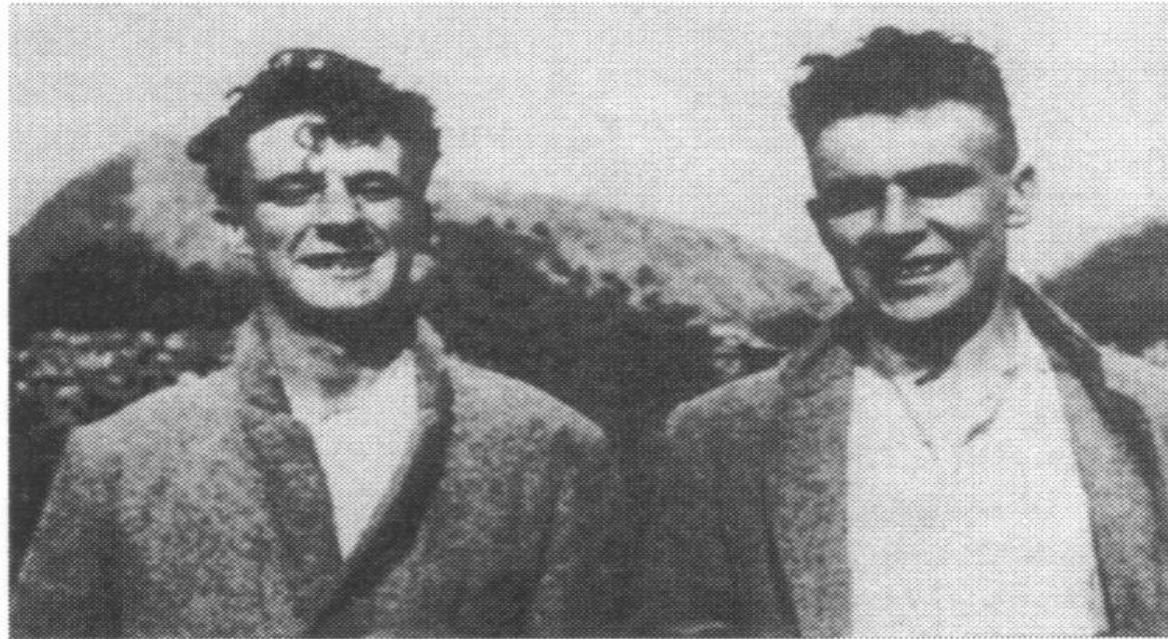
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- 75 million are diabetic or pre-diabetic
  - Heart Failure has doubled since *Statin* drugs were approved in 1987
-



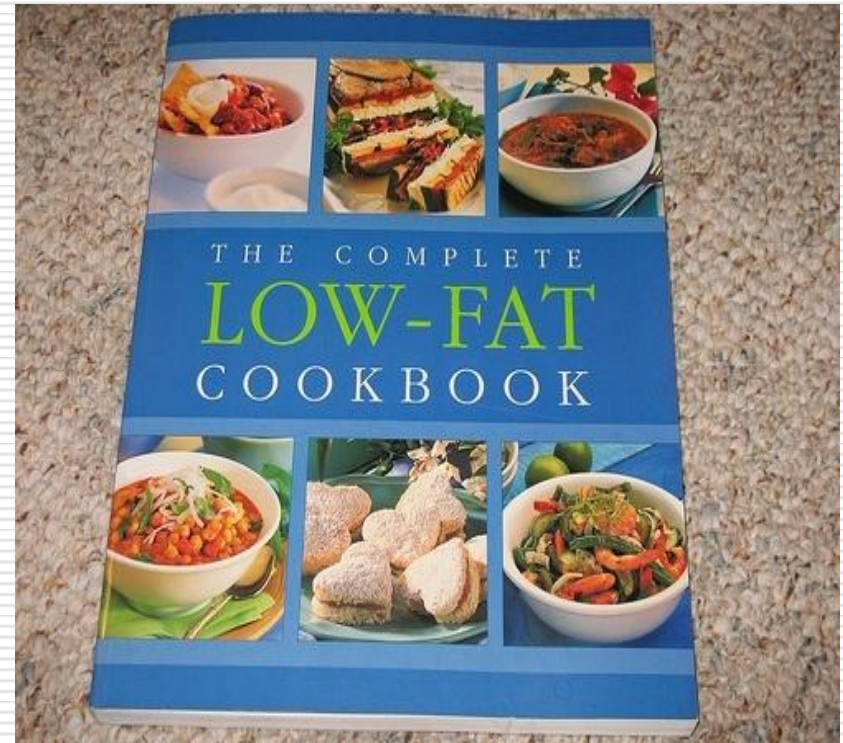
# Modern vs Traditional food



**Brothers, Isle of Harris. The younger at left used modern food and had rampant tooth decay. Brother at right used native food and had excellent teeth. Note narrowed face and arch of younger brother.**

*(Photo and caption reprinted from Price, 1938)*

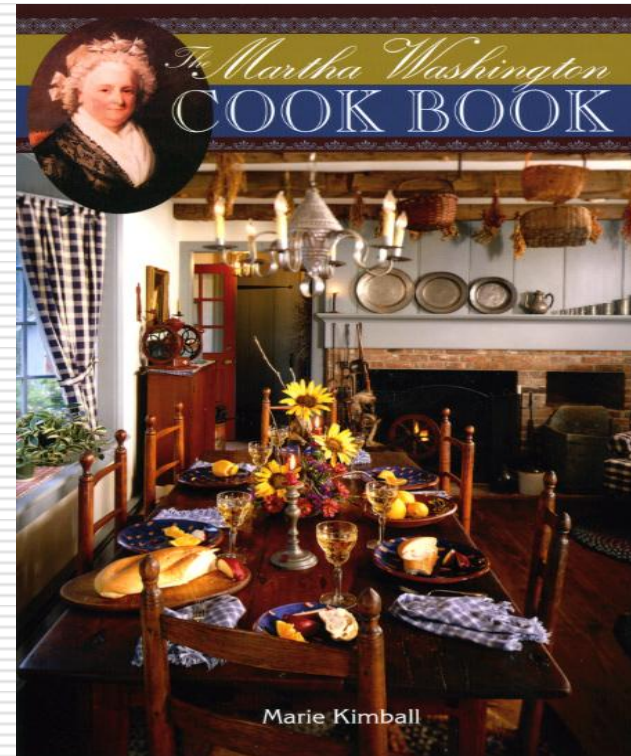
# Where did Low Fat = Good Health come from?



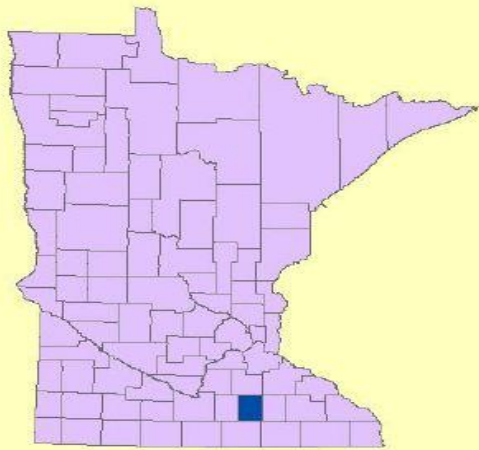


# The traditional American Diet

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# Raw Dairy was King – the largest employer in MN



***Steele County  
Minnesota***

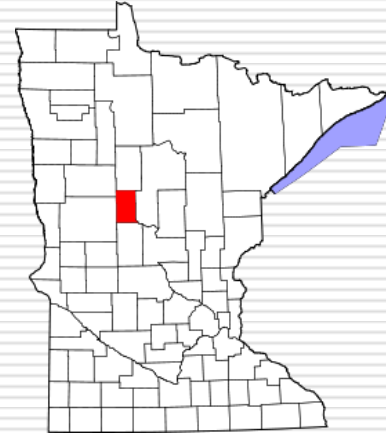
**Highway Map  
2010**

- In the early **1900s**, Steele County had **26** creameries – the most per square mile anywhere in the world!





# Great Local Butter – from the Sebekia Cooperative Creamery



- Between **1908-1939**, the Sebekia Creamery produced **27 million** pounds of butter from unpasteurized milk!

# Fourth-Generation Wrigley Reinvents Company

## Long-Lasting Wrigley



CORBIS (portrait); AP (headquarters); Getty Images (Time cover)

**William Wrigley Jr., president until 1925**



Getty Images (advertisement, portrait); Wrigley (twins)

**Philip Wrigley, 1925 to 1961**



CORBIS (portrait)

**William Wrigley, 1961 to 1999**



Wrigley (portrait, twins)

**William Wrigley Jr., 1999 to present**

**1872:** At age 11, William Wrigley Jr. runs away from home in Philadelphia to sell newspapers in New York. He sleeps underneath wagons on the street.

**1891:** William moves to Chicago to sell soap. He later switches to baking powder. To entice shop-keepers, he gives away two packages of chewing gum with each can of baking powder.

**1893:** Wrigley launches two popular brands, Spearmint and Juicy Fruit gum.

**1920:** Company sells 9 billion sticks of chewing gum annually. Wrigley breaks ground on a headquarters and becomes the first to build an officer tower on the north side of the Chicago River, an area that later becomes Chicago's Magnificent Mile.

**1939:** Debut of the Doublemint Twins; company-sponsored radio programs feature double piano players

**1944:** Philip takes Spearmint, Doublemint and Juicy Fruit off the civilian market amid wartime rationing.

**1984:** Wrigley introduces Extra sugarless gum, which later becomes a major brand.

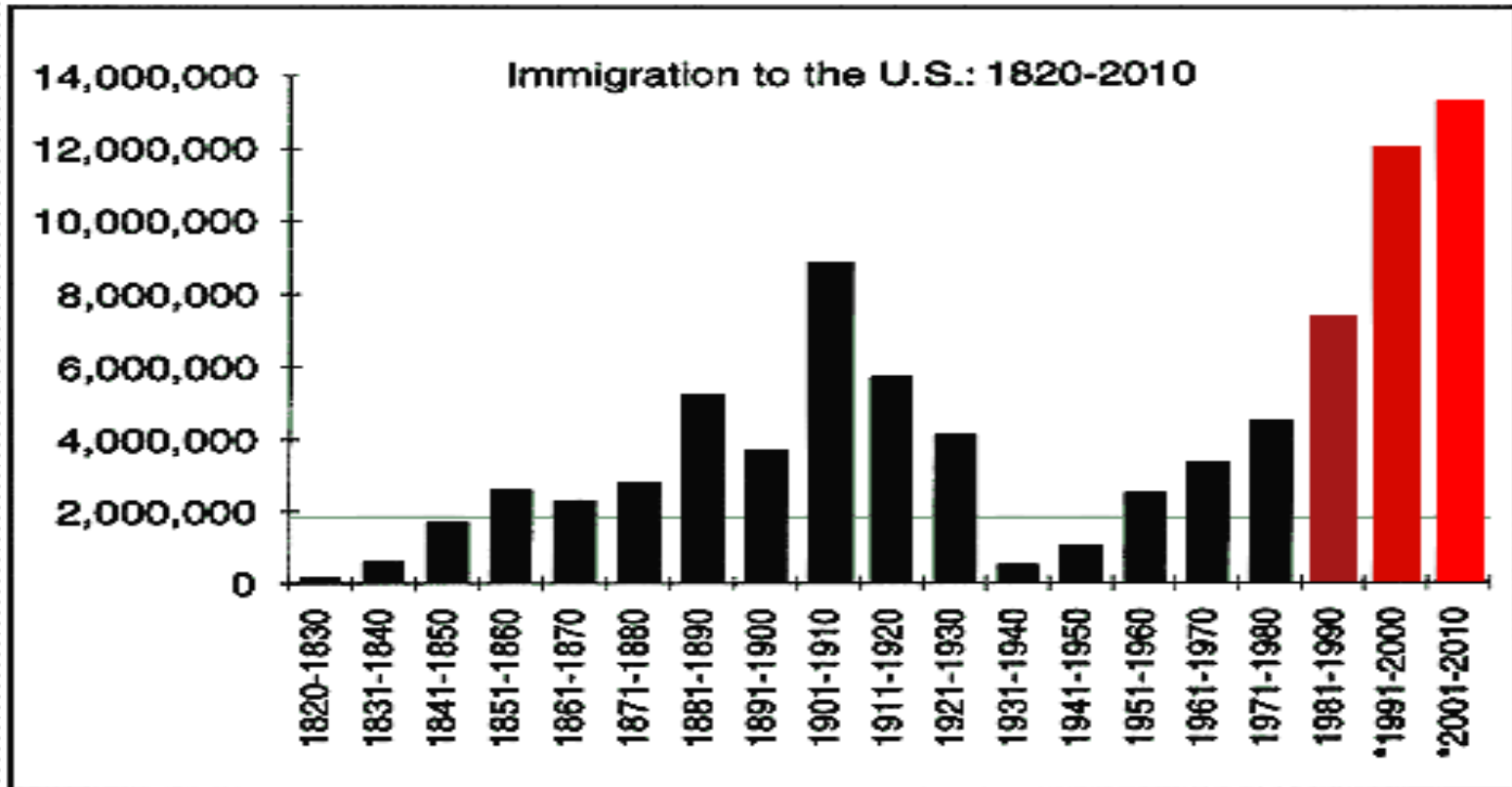
**2002:** Wrigley nears a \$12.5 billion deal to buy Hershey Foods Corp., but the deal falls apart.

**2004:** Wrigley buys Altoids, Life Savers and other candy brands from Kraft Foods Inc.

**2005:** Wrigley opens \$45 million global innovation center in Chicago and launches 72 new products.

# Immigration to the U.S.

---





# population growth in the big cities

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**1850**

- **23 million people**
- **64 percent on a farm**



**1920**

- **106 million people**
- **33 percent on a farm**

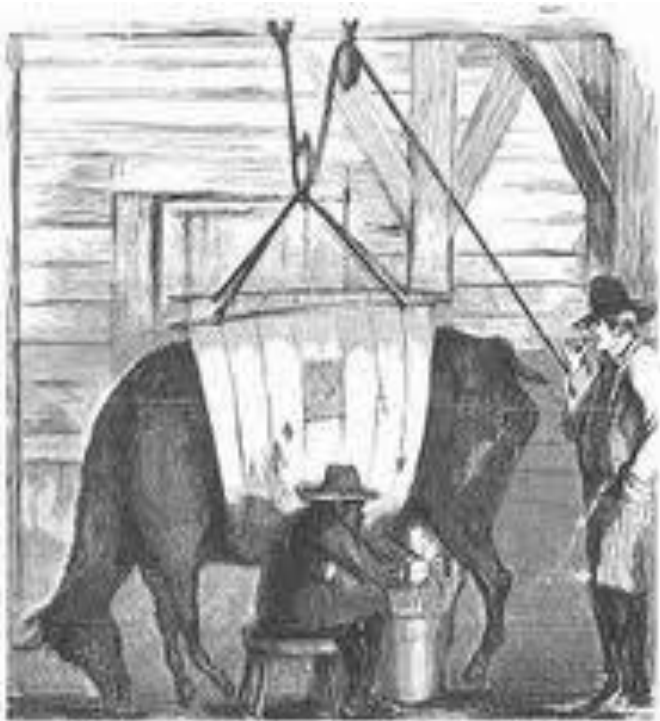
**2010:** 300 million people; less than 2 percent live on the farm

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# “The Distillery Dairy Milk Problem”

## Solution: Pasteurization

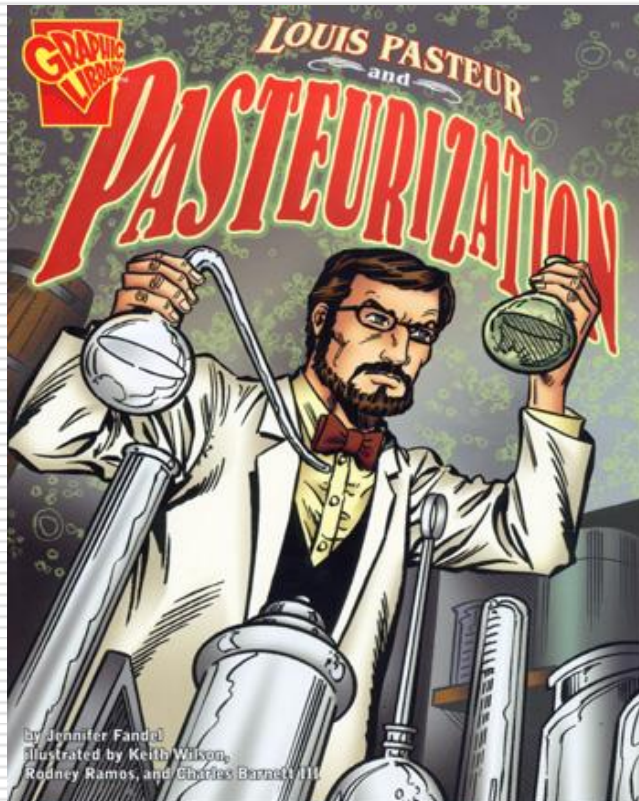


A diseased cow, unable to stand, is pulled up to be milked. Distilleries kept a stable of such animals, fed them mash and whiskey slops. The milk made babies tipsy and often sick.

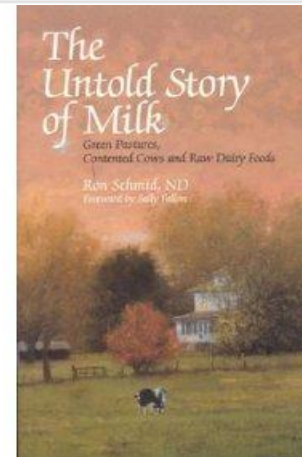


- 1910 – the yearly death rate of infants in cities was 50 percent of the birth rate.

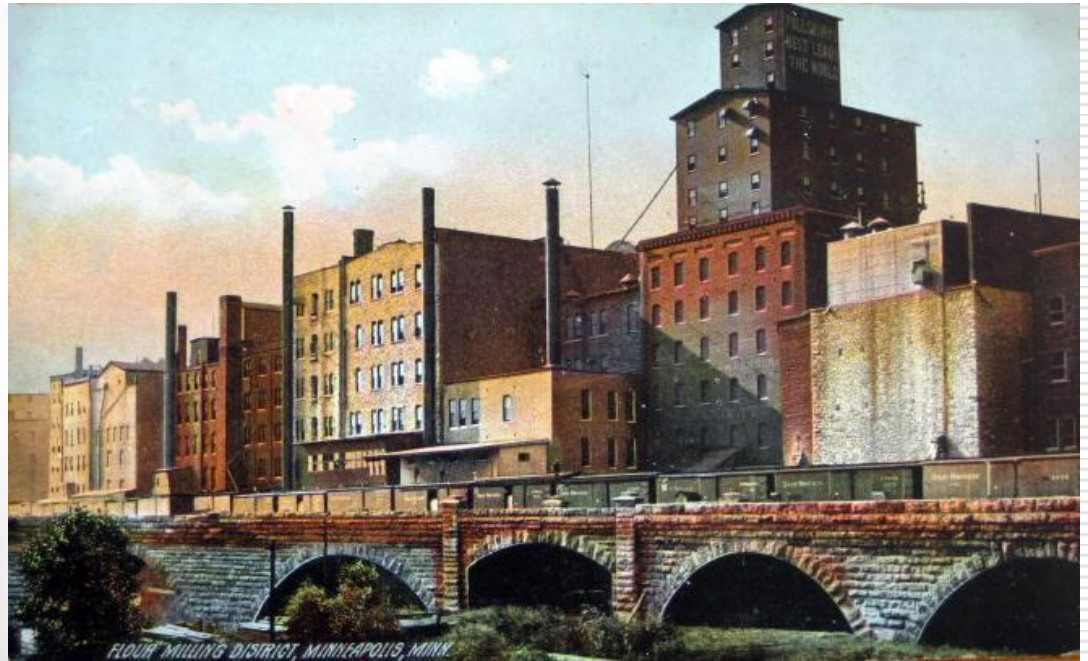
# Pasteurize & Profit



- “Pasteur’s mechanistic understanding of disease ... placed the mandate to cure squarely in the hands of the medical professionals...”



# Flour Milling Capital of the World



1880 to 1930



# The North HEALTH JOURNAL

June  
1929

Single Copies  
10c

Special  
Bread  
Number



IN THIS ISSUE—Food Fads May Cause Disease and Death—White Bread Essential to Diet—Child Needs to Play Out Doors in Sun—Tuberculosis Gains in Large Cities—Graceful Woman Indicates Well-Balanced Body—Much Stomach Trouble Due to Teeth—How Various Kinds of Bread are Made—Teach Infants Early to Eat Bread and Cereals.

## MINNESOTA PUBLIC HEALTH ASSOCIATION

SUPPORTED BY THE SALE OF CHRISTMAS SEALS

11 W. SUMMIT AVE.

ST. PAUL, MINN.

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GOVERNOR THEODORE CHRISTIANSON

LOTUS COFFMAN,

PRESIDENT, UNIVERSITY OF MINNESOTA

Gentlemen:

The Minnesota Public Health Association carries on a continuous campaign for pasteurized milk because it believes this process is of vital importance in the protection of health. It safeguards against the milk-borne epidemics of disease.

Perfectly pasteurized milk, as a safe milk, has played an important part in the high health rate Minnesota has and is now enjoying.

We advocate the increased use of safe milk as we believe it to be the best health-building food available and should be included in the diet of adults as well as children.

Very truly yours,

*E. A. Meyerding*

E. A. Meyerding, M. D.  
Executive Secretary

Minnesota Public Health Assn.



# Eat More Bread

for  
Health  
Strength  
and  
Beauty

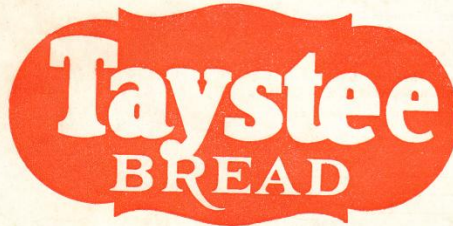
All through this magazine you will find reasons why—but the best one, after you have tasted ours, will be

**Because You  
Like It!**



Ask Your Dealer for

**Taystee**  
(32 Slices)  
1½ lb.



**Purity  
Toast**

**Purity Baking Co.**

**Taystee**  
(22 Slices)  
1 lb.

**Purity  
Cakes**

# White Bread Essential In Diet, say Doctors

**P**RESENT - D A Y food fads constitute a menace to the health of the people and the economic condition of the country.

This fact was brought out in a resolution passed recently at Minneapolis by the Hennepin County Medical Society, which warns of the dangers in extremes in diets, condemns the exaggerated health claims made by advertisers for various food fads and urges a return to the older staple foods.

Changes in the normal, common-sense diet should be made only when prescribed by a properly trained person after a careful study of the needs of the individual, the resolution states. So much valuable information is contained in this resolution signed by Dr. N. O. Pearce, president, and Dr. Earling W. Hansen, secretary, that we print it in full:

"We, the members of the Hennepin County Medical Society, go on record decrying the fads which prevail in our land today, and especially the food fads which tend to foist on the public high-priced patented foods, which are often misrepresented by their elaborate methods of advertising. The substitution of these highly-priced, patented foods not only very often has become a detriment to the health of the consumer but also has become the source for an alarming economic condition, due to the great decrease in the consumption of wheat, meat and other



For a picnic lunch nothing is more healthful and appetizing than delicious sandwiches and pure pasteurized milk.

products of the farm.

"Very few of these fad foods can take the place of the older staple foods; namely, good meat, dairy products, green vegetables, fruits and the better grades of bread prepared from white flour. The present-day indiscriminate substitution of an excess of rough foods, such as flours containing bran and the irritating vegetables, is producing a great deal of unnecessary discomfort and chronic dyspepsia, and has reached proportions of a distinct health menace. The similar tendency to eliminate animal proteins from the diet may also

become a menace to the public health.

"Any balanced diet should contain some animal protein, fruits, vegetables, especially the leafy vegetables, for their vitamin and mineral salt content, digestible fat, such as butterfat, and sufficient easily digestible carbohydrates to afford readily available energy.

"Carbohydrates, including sugars and starches, but especially starches, furnish the American public their main fuel for energy, the quantity varying with the amount of physical activities which the individual expends. Much of the starch should be supplied by the most available and easily digestible foodstuffs, of which white flour is the best example, as bread, if baked sufficiently to break up the raw starch granules.

"Starch furnished by too

(Continued on Page 14)

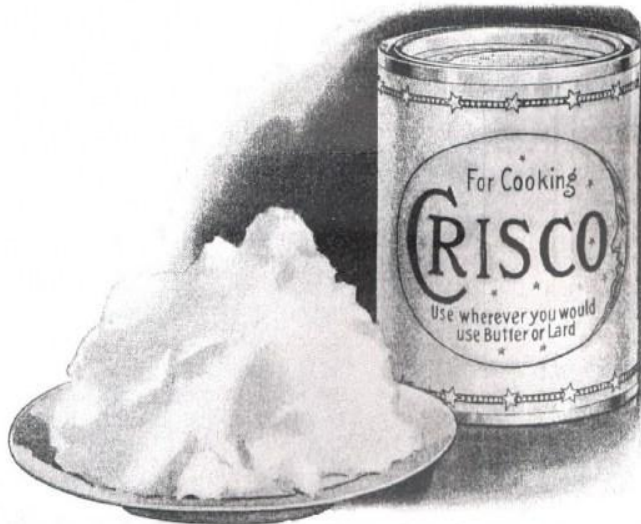


## The Northwestern HEALTH JOURNAL

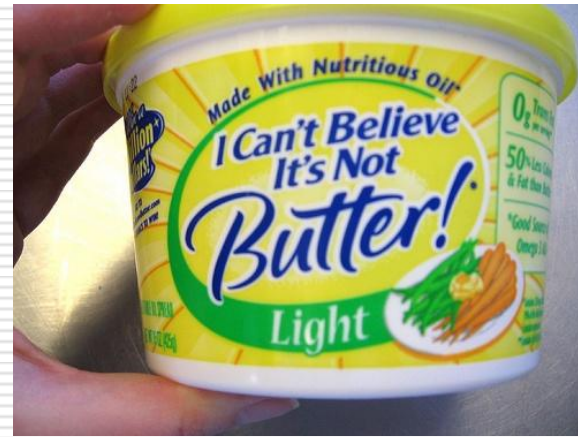
for June, 1929  
VOLUME FOURTEEN, NUMBER SIX



# The Oiling of America...100 years!



Crisco—Better than butter for cooking



**INGREDIENTS:** WATER, VEGETABLE MONO AND DIGLYCERIDES\*, RICE STARCH, SALT, GELATIN, LACTOSE (MILK), VEGETABLE DATEM\*, COLORING, (POTASSIUM SORBATE, CALCIUM DISODIUM EDTA) USED TO PROTECT QUALITY, SOY LECITHIN, LACTIC ACID, NATURAL AND ARTIFICIAL FLAVORS, VITAMIN E, CYANOCOBALAMIN (VITAMIN B12), PYRIDOXINE HYDROCHLORIDE (VITAMIN B6), VITAMIN A PALMITATE, BETA CAROTENE (FOR COLOR).  
\*ADDS A NEGLIGIBLE AMOUNT OF FAT

# Trans-fat and all - Crisco won the marketing battle against lard



By 2000, soybean oil and hydrogenated soybean oil had **70 percent of the market.**



# Butter Consumption steadily declined



**1910:**

**18-20 lbs**

-----

**2000: <4 lbs**



# WW II accelerated change



**Creamery workers**  
went to war –  
replacements made  
tainted milk.

**Margarine (imitation  
butter)** came into  
widespread use.

**Small farms,  
creameries, and  
trains** disappeared.

1950s farmland disappeared...



# Heart Night at the Copacabana

---

1949 - AHA began  
fingering  
America's  
traditional  
foods as the  
cause of heart  
disease





# A steady increase in reported cases of heart disease



**AHA** board member –  
“father of the low fat diet”

---



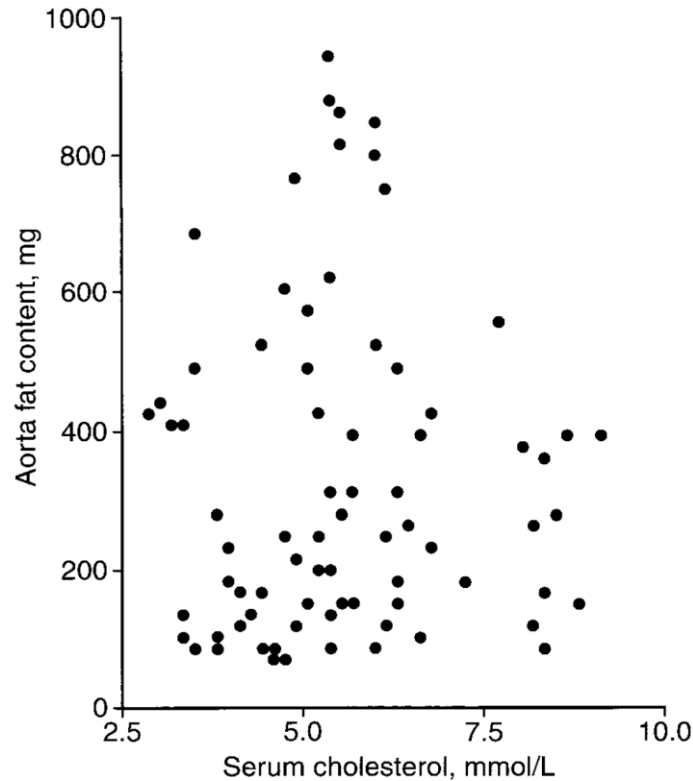
Ancel Keys in 1958  
*Courtesy, University of Minnesota Archives*

Relentless  
promoter  
of the low  
fat diet

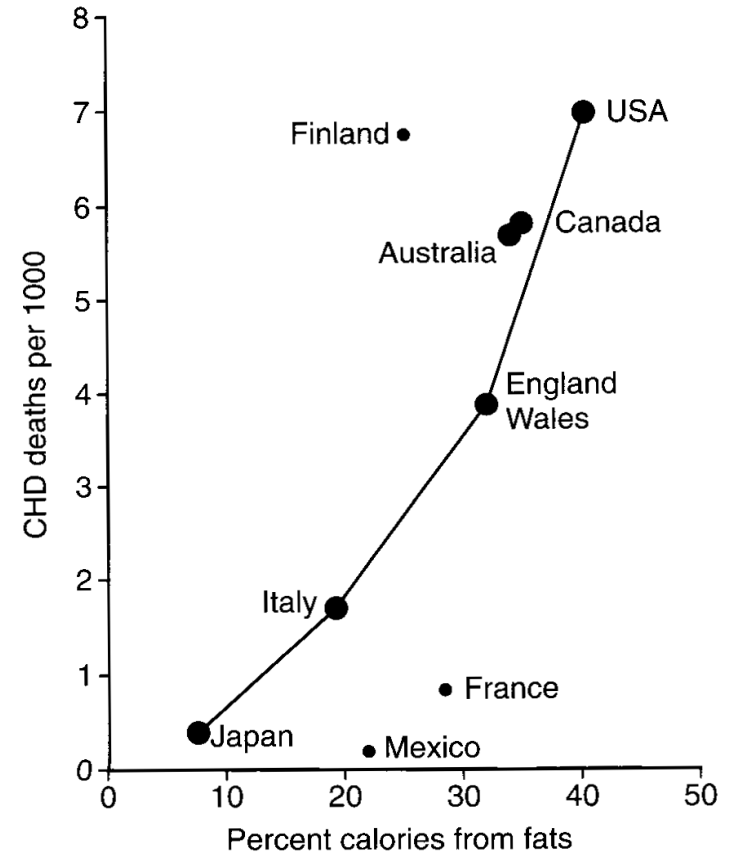
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# 1953: Key's Six Country Analysis

## Selecting 6 of 21 countries



**Figure 4** Blood cholesterol and atherosclerosis<sup>9</sup>





# Associations Keys ignored:

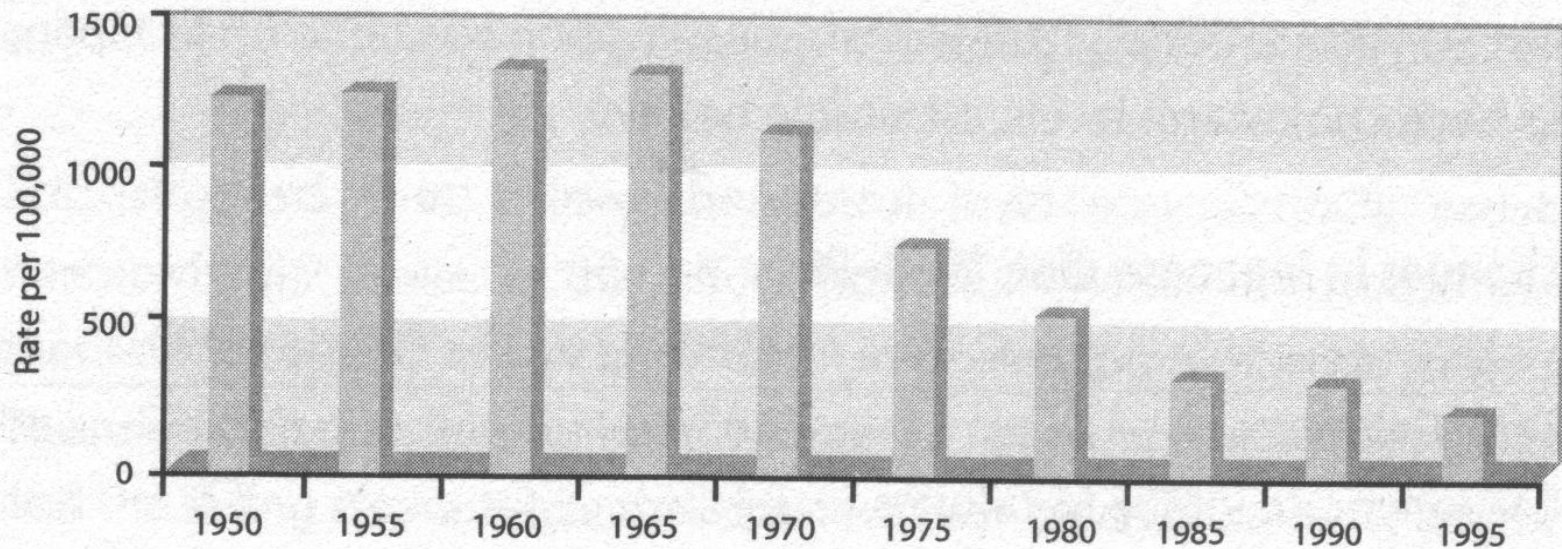


- Fewer calories
- Much less sugar and refined foods
- Suffered more deadly strokes than we did....

# Strokes: #1 killer in Japan

## *THE GREAT CHOLESTEROL CON*

**Fig. 21 Death rates from stroke in Japanese men (aged 60–69), 1950–95**



# Changes in the Japanese diet after the war:

	<u>1958</u>	<u>1999</u>
<b>Carb %</b>	<b>84</b>	<b>62</b>
<b>Protein</b>	<b>11</b>	<b>18</b>
<b>Fat</b>	<b>5</b>	<b>20</b>
<b>Calories</b>	<b>2,837</b>	<b>2,202</b>



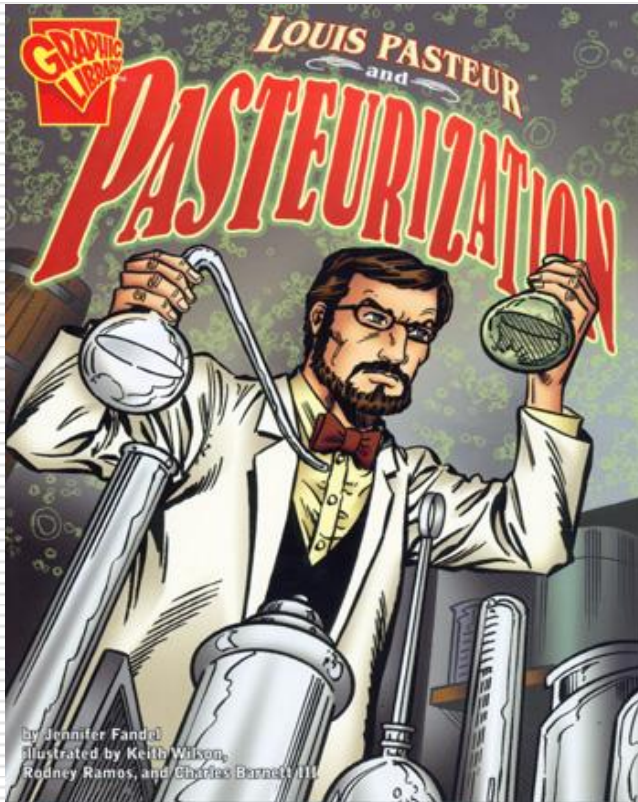
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Association is not  
the same as...  
cause and effect

---

# Science Gone Awry

## Self-Promotion – Data Selection



# 1961: American Heart Association adopts Keys' low fat diet

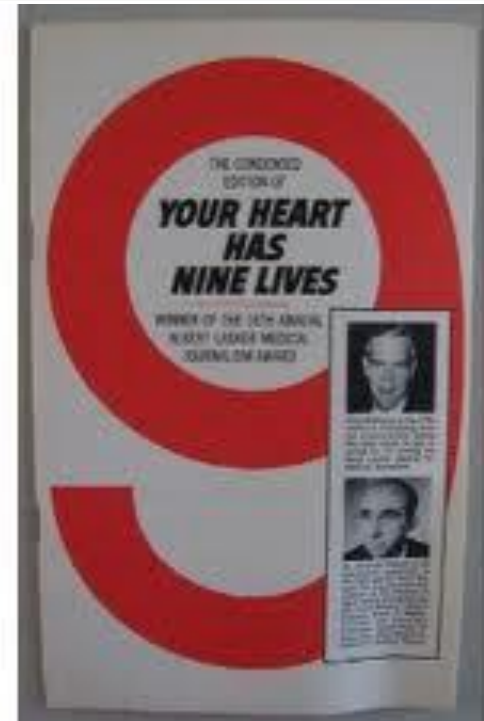
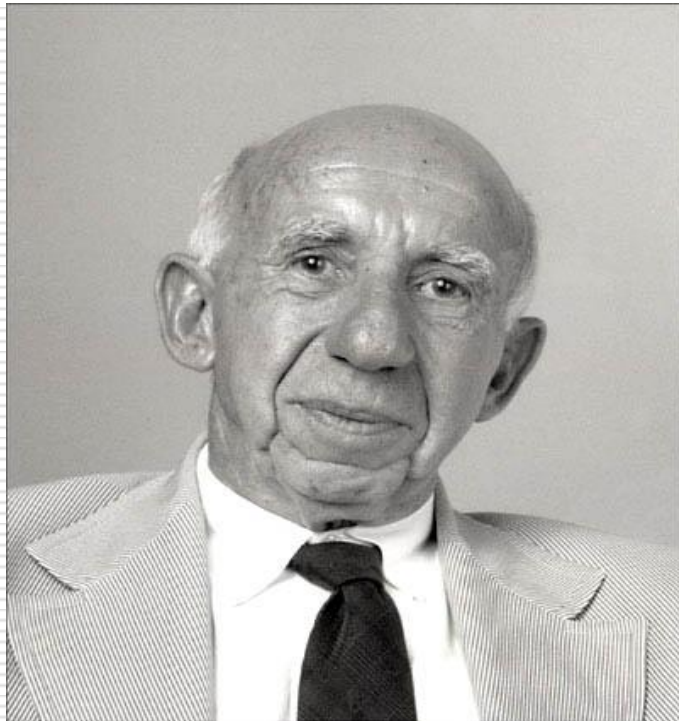


- ☐ Emphasize carbohydrates
- ☐ Replace saturated fat with poly fat



# Who funded AHA board member Jeremiah Stamler's book on heart disease?

\_\_\_\_\_ and \_\_\_\_\_?



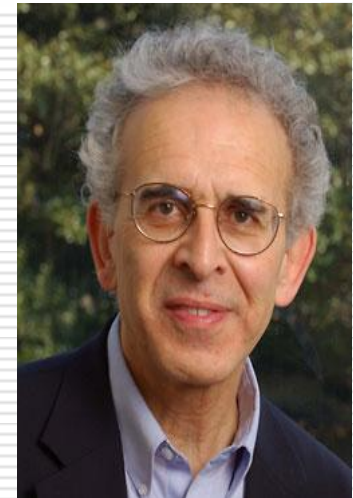
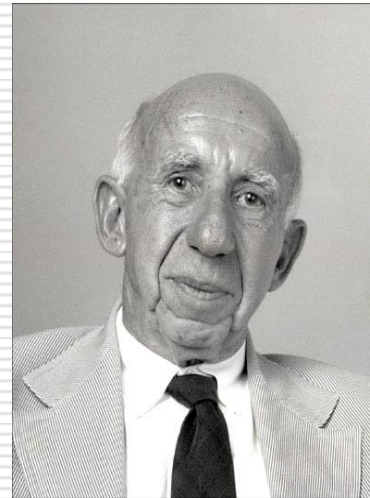
# Mazola and Fleischmann's

1961: **Mazola Corn Oil** and **Fleischmann's** paid for a saturated fat risk handbook distributed free to all U.S. physicians by the **AHA**.



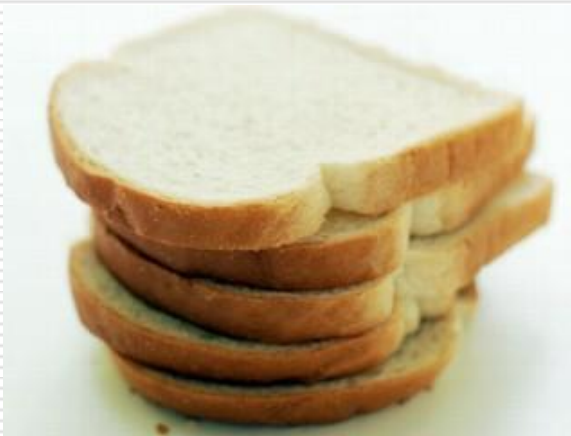
# 1970s: "Saturated Fat is the ***Greasy Killer***"

- **Michael Jacobson's** *Center for Science in the Public Interest*
- **Dr. Stamler** is a board member
- ***Anti-Saturated Fat Attack***





By the 1970s, the ***Foods of Mass Destruction*** were well established

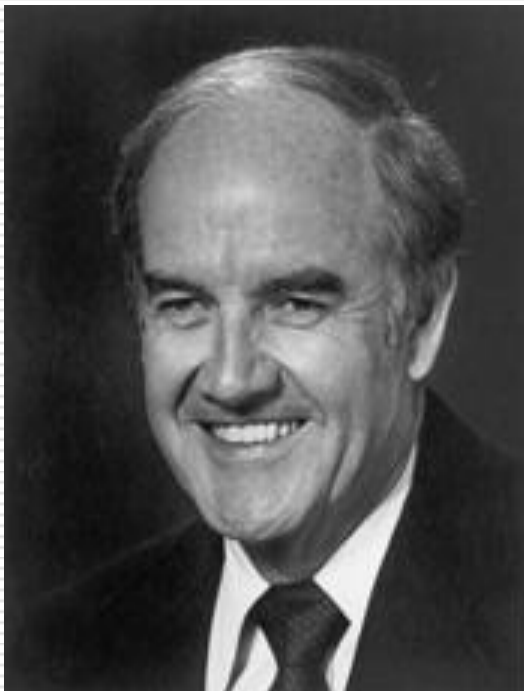


“Saturated fat and cholesterol are to blame!”

- 1. Heart disease**
  - 2. Obesity**
  - 3. Diabetes**
  - 4. Cancer**
-

# 1980-2010: “Low Fat” *Dietary Guidelines for Americans*

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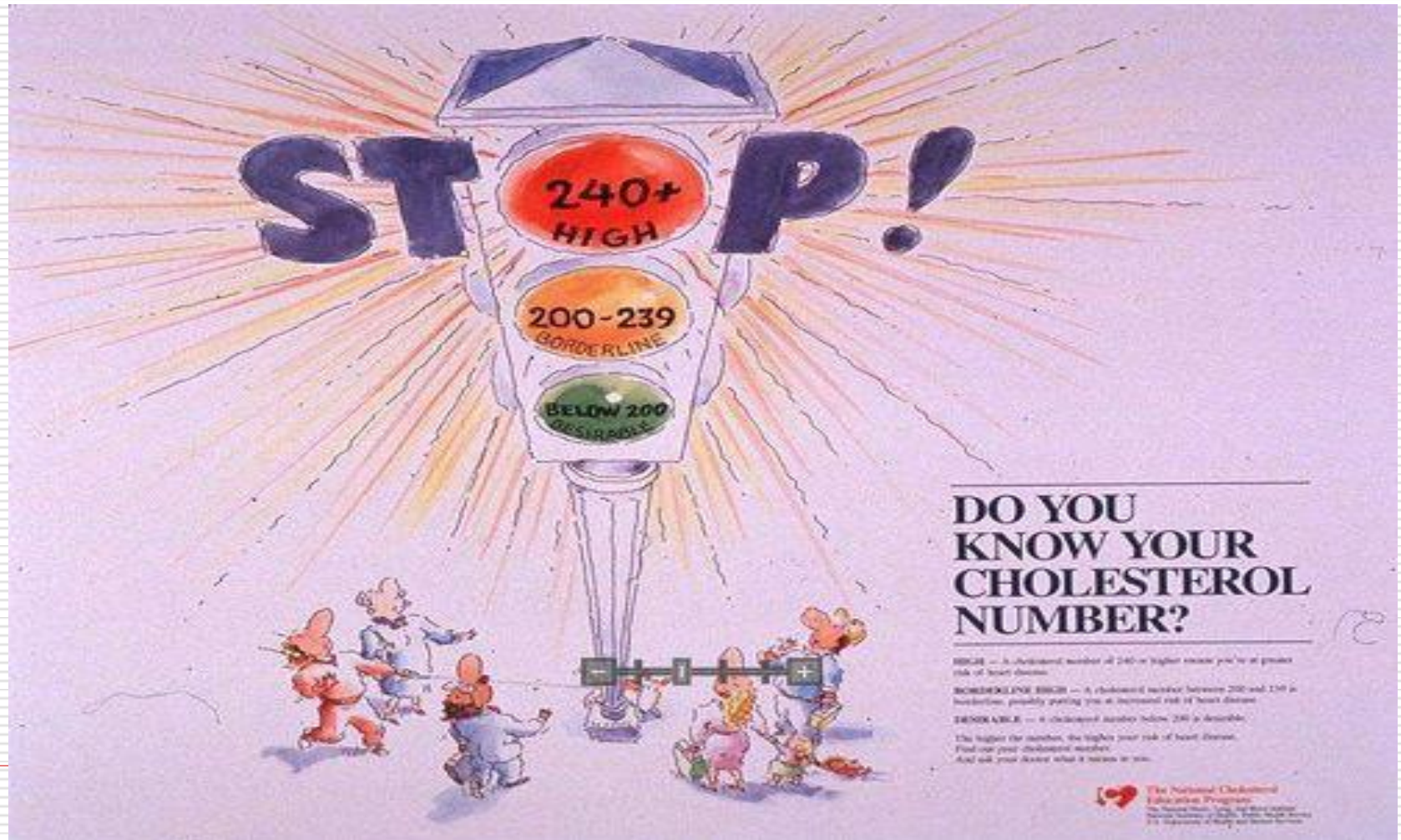
## **McGovern Committee: 1978: Low Fat Diet**

“There are no risks that can be identified and important benefits can be expected...”

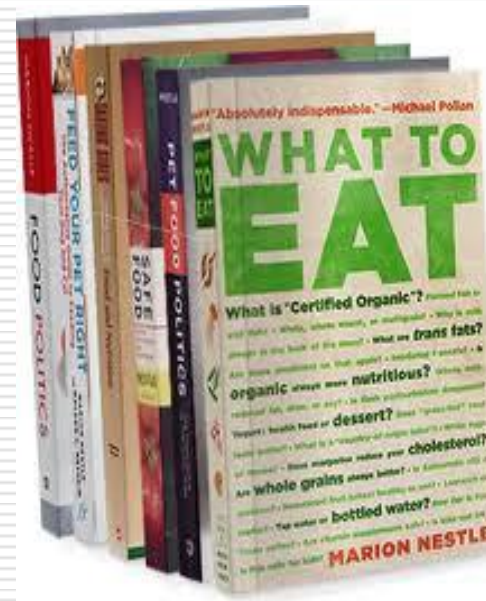
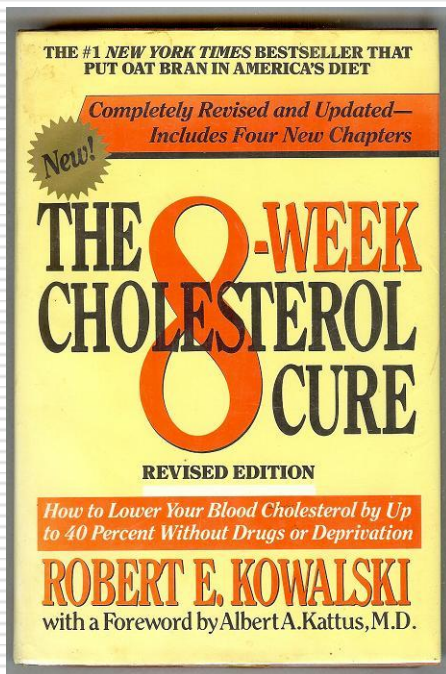
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# National Cholesterol Education Program

## 1985 to the present



# Decades of confusion...







## Has low fat failed the test of time?

**300 million** people - **25 percent** are diabetic or pre-diabetic - listening to the experts – fearing healthy saturated fat – afraid of cholesterol – and faced with “**Disease Management**” costs in the **trillions of dollars...**

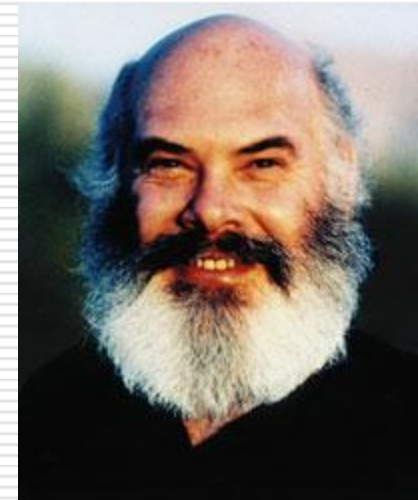
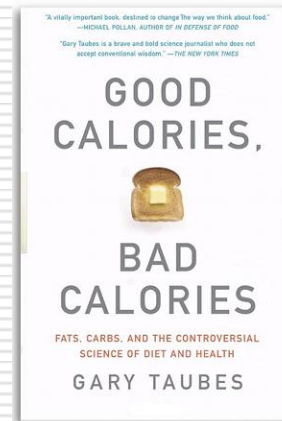
Yes, says Gary Taubes,  
**"It was a big fat lie!"**



# Dr. Andrew Weil on Taubes' *Good Calories, Bad Calories*

---

- "I think this is a very important book. I have been recommending it to my medical colleagues and students...."



**No** says Dr. Oz! – saturated fat is dangerous!

---





# And the winner is .....TAUBES!



## Low Risk for CHD

- **Glucose:** 86
- **HDL:** 68
- **TG:** 64
- **TG:HDL** Ratio = 1
- **VLDL:** 19
- LDL *large fluffy Pattern A*
- **CRP:** 0.72

# "Yes," says Dr. Eric Westman, Duke University, "Atkins was right"



- ❑ "My understanding of how things are shifting:
- ❑ We should be talking about blood sugar and insulin..."

# Carbohydrates are the problem

---

**zero biological  
requirement**

**raise blood sugar - fat  
does not**

---

# *Since 1980: 400+ Calories*

---

Sugar, HFCS, White  
Bread, bagels, Donuts,  
muffins, pasta, Extruded  
dry boxed cereal, Soft  
drinks, skim milk,  
smoothies, & fruit juices

---



# **SUGAR: Damaging Calorie**

---

- **White sugar (sucrose) =**
  - **50 percent glucose; 50 percent fructose**
  
  - **High Fructose Corn Syrup =**
  - **55 percent fructose; 45 percent glucose.**
-

# Fatty Liver Traffic Jam

---

- **Glucose goes into the blood and raises blood sugar**
  - **Fructose goes to the liver and is turned into body-made-fat: Triglycerides**
-

**Triglycerides** go up –  
protective **HDL** goes down



# How long have we known this?

## Since 1955!

---

- John Gofman (Berkeley) reported that excess carbohydrates cause the liver to overproduce triglycerides (TG), which, in turn, reduces HDL.
  - *"The majority of people with heart disease have carbohydrate-induced lipemia!"*
-



Is a calorie, a calorie, a calorie?

---

No - There are major metabolic differences in their effects!

---

## Conclusion

---

**Emphasize fat**, you will burn fat and improve your lipid profile.

**Emphasize carbs**, you will make, store and lockup fat and set the stage for diet-related heart disease.

---

# Obesity

---

- ☐ **Is a metabolic disturbance in fat regulation**
  - ☐ **Brought on by consuming excess carbohydrates**
-

## Diabetes and Heart Disease

---

- Reflect the quality of the calories – not the quantity.
  - And the percentage of refined, easily-digested carbohydrates in the diet.
-



# Meeting One/Day 2/2010 DGAC

- **Dr. Eric Rimm:** "I wanted to make a radical point, one for which I'll probably get kicked off the stage, but the whole issue of total fat and the 20 to 35 percent of calories from fat is one that has troubled me..."



- Dr. Eric Rimm, Harvard University

*"Cholesterol in food has no affect on cholesterol in the blood and we've known that all along...."*

---



Dr. Ancel Keys, in retirement, 1997

---

Phillip Handler, Director,  
National Academy of Sciences, 1980

---

**“What right has the federal government to propose that the American people conduct a vast nutritional experiment ... on the strength of so very little evidence that it will do them any good?”**

---

Mr. Secretary,  
“tear down this **HIGH CARB** Wall!

