The Oiling of America

By Mary G. Enig, PhD, and Sally Fallon
Epidemic of Modern Heart Disease

1921
First recorded Myocardial Infarction (MI) in US

1930
3000 US deaths from Myocardial Infarction

1960
500,000 US deaths from Myocardial Infarction
The Diet-Heart Theory or The Lipid Hypothesis

“Bad” Diet
(Too much cholesterol and saturated fat)

High Blood Cholesterol

Atherosclerosis
(Build-up of Plaque in the Arteries)

Coronary Heart Disease
Lande and Sperry 1936

No correlation between cholesterol levels and atherosclerosis.

Note:
120 mg/dl = 3.1 mmol/L
240 mg/dl = 6.2 mmol/L
400 mg/dl = 10.3 mmol/L

Archives of Pathology
22, 301-312, 1936
The Diet-Heart Theory or The Lipid Hypothesis

“Bad” Diet
(Too much cholesterol and saturated fat)

High Blood Cholesterol

Atherosclerosis
(Build-up of Plaque in the Arteries)

Coronary Heart Disease
GROUP OF NY BUSINESSMEN, 40-59, placed on “Prudent Diet” of
- corn oil and margarine instead of butter
- cold breakfast cereals instead of eggs
- chicken and fish instead of beef

CONTROL GROUP of the same age ate eggs for breakfast and meat three times a day.

RESULTS IN 1966: Prudent Dieters had average serum cholesterol of 220 (5.6), compared to 250 (6.5) in controls.

SURPRISING DOWNSIDE: EIGHT deaths from heart disease among Prudent Dieter group, and NONE among controls.

DIET-HEART STUDY CANCELLED: NHLBI organized National Diet-Heart Study involving one million men to compare Prudent Diet with one high in meat and fat. Pilot study involving 2000 showed Prudent Diet worthless. Diet Heart Study abandoned “for reasons of cost.”

Bulletin NY Academy of Medicine 1968
Coronary Heart Disease Policy and the Edible Oil Industry

REMOVED REFERENCE: In 1965, Dr. Fred Mattson of Procter and Gamble (producer of vegetable oil products) told AHA to change its Diet/Heart statement, removing any reference to the trans fatty acids.

ALTERED DOCUMENT: The altered official document encouraged consumption of partially hydrogenated fats.

SUPERVISION: In 1960s, the edible oil industry "supervised" AHA, NHLBI and American Dietetic Association.

REVOLVING DOOR POLICY: In 1971, FDA's general counsel became president of the edible oil trade association; he was in turn replaced at the FDA by a food lawyer, Peter Barton Hutt of Covington and Burling, who had represented the edible oil industry.

BACK ROOM CONTROL: In 1970s and 1980s, Mattson held two controlling positions in the Lipid Research Clinic Trials that led to the National Cholesterol Education Program.
The American Medical Association and the Lipid Hypothesis

“The anti-fat, anti-cholesterol fad is not just foolish and futile... It also carries some risk.

“Scientific reports linking cholesterol and heart attacks have touched off a new food fad among do-it-yourself Americans. But dieters who believe they can cut down on their blood cholesterol without medical supervision are in for a rude awakening. It can’t be done. It could even be dangerous to try.”

From a general news release issued by the AMA on October 12, 1962
"Diet and Coronary Heart Disease"
AHA, AMA and NAS Recommendations 1972-1973

CHOLESTEROL TOO HIGH: Average level of serum cholesterol in most American men and women is undesirably elevated. Important to lower cholesterol levels in the blood.

MUST MEASURE CHOLESTEROL: Measurement of cholesterol should be routine in physical examinations, even in early adulthood.

DIETARY ADVICE: Americans in "risk" category should receive “appropriate dietary advice.”

REDUCE SATURATES: Americans in "risk" categories should reduce intake of saturated fat by substituting polyunsaturated vegetable oils.

PROCESSED FOODS: Modified and ordinary foods useful for this purpose should be readily available on the market, reasonably priced and easily identified by appropriate labeling. Any existing legal and regulatory barriers to the marketing of such foods should be removed.

MORE STUDIES: More studies need to be done to determine whether modification of plasma lipids (lowering cholesterol) can reduce CHD.
Federal Food, Drug and Cosmetic Act 1938

"... there are certain traditional foods that everyone knows, such as bread, milk and cheese, and that when consumers buy these foods, they should get the foods that they are expecting ... [and] ... if a food resembles a standardized food but does not comply with the standard, that food must be labeled as an 'imitation'."

FDA "Imitation" Policy 1973

"... [attempted] to provide for advances in food technology and ... [gave] ... manufacturers relief from the dilemma of either complying with an outdated standard or having to label their new products as 'imitation'. ... [since] ... such products are [not] necessarily inferior to the traditional foods for which they may be substituted. ... The regulation defined 'inferiority' as any reduction in content of an essential nutrient that is present at a level of 2 percent or more of the U.S. RDA ... “

*Federal Register, Vol 56 #229, Wednesday, November 27, 1991, Proposed Rules*
Senate Select Committee on Nutrition and Human Needs


PROMOTED AHA "lipid hypotheses"; Dissenting testimony was ignored.

FINAL REPORT claimed USDA data showed that animal fats cause and vegetable oils prevent cancer and heart disease.

INDEPENDENT ANALYSIS of same USDA data showed vegetable oils cause and animal fats prevent cancer and heart disease.

BENEFIT TO EDIBLE OIL INDUSTRY: The report and accompanying publicity continued American dietary trends towards more vegetable oils, less animal fat, but medical profession remained skeptical of value of cholesterol-lowering measures.
The 40-Year Framingham Study

Dr. William Kannel: "Total plasma cholesterol is a powerful predictor of death related to CHD"

American Heart Journal 1987, 114, 413.
The 40-Year Framingham Study

Actual rate of increase is 0.13% between 182 and 244

Stamler: "240% increase in risk"

<table>
<thead>
<tr>
<th>Blood Cholesterol Level (Mg/100ML)</th>
<th>84</th>
<th>205</th>
<th>294</th>
<th>1124</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual CHD &quot;Events&quot; per 1,000</td>
<td>2.3</td>
<td>5.2</td>
<td>7.7</td>
<td>29</td>
</tr>
</tbody>
</table>

(interval) 85-184 (100) 185-284 (100) 285-384 (100) 385-484 (100) 485-584 (100) 585-684 (100) 685-784 (100) 785-884 (100) 885-984 (100) 995-1094 (100) 1095-1194 (100)
Relative Risk vs Absolute Risk

Suppose CHD death rate at 240 mg (6.2) cholesterol is 2/1000 and at 160 mg (4.1) is 1/1000

The rate difference (absolute risk) is 1/1000 or 0.001% but the difference in relative risk is 100% (2 is 100% greater than 1)

Now suppose CHD death at 240 mg (6.2) is 2/1billion and at 160 mg (4.1) is 1/1billion

The rate difference (absolute risk) is 1/1billion or 0.0000001% but the difference in relative risk is still 100% (2 is 100% greater than 1)

Cholesterol theory proponents usually exaggerate benefits by reporting them in terms of relative risk and minimize side effects by reporting them in terms of absolute risk.
Fatal Heart Attack and Breast Cancer Rates in the CARE Trial

<table>
<thead>
<tr>
<th></th>
<th>Patients in Statin Group</th>
<th>Patients in Control Group</th>
<th>Relative Risk</th>
<th>Absolute Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death from Heart Attack</td>
<td>96 of 2081 (4.6%)</td>
<td>119 of 2078 (5.7%)</td>
<td>-19 %</td>
<td>-1.1%</td>
</tr>
<tr>
<td>Cases of Breast Cancer</td>
<td>13 of 290 women (4.5%)</td>
<td>1 of 286 women (0.3%)</td>
<td>+1500%</td>
<td>+4.2%</td>
</tr>
</tbody>
</table>

In terms of relative risk, breast cancer was 1500% higher in those taking the cholesterol-lowering drug.

Source: Ravnskov. *The Cholesterol Myths*, CARE Trial data
What They Really Found at Framingham

"In Framingham, Massachusetts, the more saturated fat one ate, the more cholesterol one ate, the more calories one ate, the lower people's serum cholesterol. . . we found that the people who ate the most cholesterol, ate the most saturated fat, ate the most calories weighed the least and were the most physically active."

William Castelli, Director
The Framingham Study

Archives of Internal Medicine, Jul 1992, 152:(7):1371-1372
Multiple Risk Factor Intervention Trial (MRFIT) for 362,000 Men

Dr. John La Rosa of AHA Nutrition Committee: Curve starts to "inflect" after 200 mg (5.1). Cholesterol Consensus Conference recommended all adults reduce cholesterol to below 200 (5.1)

![Graph showing total and CHD deaths per 1,000 people based on cholesterol levels.]

Note: Highest rate of coronary "events" found in those taking blood pressure lowering medicine.

140=3.6   299=7.7   Smith, *The Cholesterol Conspiracy*, p 40
Lipid Research Clinics Coronary Primary Prevention Trial (LRC-CPPT) 1984

COST: $150 million taxpayer dollars.

DRUG TRIAL: One group on cholesterol-lowering drug; one on placebo.

DIET: All subjects on low-cholesterol, low-saturated-fat diet.

RESULTS: Researchers claimed group taking drug had 17% reduction in rate of CHD; independent researchers found NO difference in CHD between drug and placebo groups.

CLAIM: Average cholesterol reduction was 8.5%. Led to oft-repeated statement by Rifkind: "For each 1% reduction in cholesterol, we can expect a 2% reduction in CHD events."

SIDE EFFECTS: Group taking drug had increase in deaths from cancer, stroke, violence and suicide

MEDIA PORTRAYAL: Popular press and medical journals portrayed LRC-CPPT as the long-sought proof that animal fats are the cause of heart disease. JAMA, 1984, 251:359
Framingham Revisited

30 YEARS LATER: Investigators looked at the participants after 30 years:

LOWER CHOLESTEROL = GREATER RISK OF DEATH

“For each 1% mg/dl drop of cholesterol there was an 11 percent increase in coronary and total mortality.”

JAMA 1987;257:2176-2180
Ancel Keys: Six-Country Study

Journal of Mount Sinai Hospital 20, 118-139, 1953.
All Countries

Country Pairs

150=3.9
200=5.1
250=6.5

MONICA Study

150=3.9
200=5.1
250=6.5

Graph Used in Sweden to Justify the Anti-Cholesterol Campaign

150 = 3.9
200 = 5.1
250 = 6.5
MONICA Study

150=3.9
200=5.1
250=6.5
Saturated Fat and Heart Disease

Lower rates of heart disease are associated with higher levels of saturated fat in the diet: The French, Swiss, Dutch, Icelandic, Belgium, Finnish and Austrian paradoxes!!

The Wisdom of Galileo

“By denying scientific principles, one may maintain any paradox.”
1984 Cholesterol Consensus Conference

APPEARANCE: Designed to appear objective and comprehensive

DISSENTERS: Allowed to speak, but views not included in panel's report

CONCLUSIONS: Written before the conference convened!

RISK POINT DEFINED: Defined all individuals with cholesterol over 200 (5.1) as “at risk.”

SCREENING: Called for mass cholesterol screening.

DIET: Recommended "prudent diet," low in saturated fat and cholesterol, for "at risk" Americans, even though no long term studies had ever been done of such a diet.

RECOMMENDATION: Advised replacement of butter with margarine.
National Cholesterol Education Program

LAUNCH: Launching "announced" at Consensus Conference, actually begun a year before.

STATED GOAL: Change physicians' attitudes.

AIMED AT PHYSICIANS: Large "Physicians Kit" sent to all doctors.

PHARMACEUTICALS: American Pharmaceutical Association on NCEP coordinating committee.

DIET RECOMMENDATIONS: Reduce cholesterol and saturated fat; use margarine instead of butter.

ADDITION IN 1990: NIH recommended the Prudent Diet for all Americans above age 2
"Evidence relating plasma cholesterol levels to atherosclerosis and CHD has become so strong as to leave little doubt of the etiologic connection."

"The recent consensus conference on cholesterol... implied that levels between 200 and 240... carry at least a mild increase in risk, which they obviously do..."

"If hypercholesterolemia is defined... as a plasma cholesterol level exceeding 240... for middle-aged people, this means that 15% to 20% of American adults have an elevated cholesterol level";

"...the simple step of measuring the plasma cholesterol level in all adults... those found to have elevated cholesterol levels can be designated as at high risk and thereby can enter the medical care system... an enormous number of patients will be included."
"Many physicians will see the advantages of using drugs for cholesterol lowering. . . The recent and dramatic surge of interest in cholesterol-lowering drugs by the pharmaceutical industry support the belief that use of these drugs will be widely accepted by the medical community. . . a positive benefit/risk ratio for cholesterol-lowering drugs will be difficult to prove."

"Whether diet has a long term effect on cholesterol remains to be proved. . . Public health advocates furthermore can play an important role by urging the food industry to provide palatable choices of foods that are low in cholesterol, saturated fatty acids and total calories."

"The demonstration that lowering the plasma cholesterol level will reduce the risk of CHD provides a strong impetus to intervene in the 'mass hypercholesterolemia' prevalent among Americans. Dietary modification for this purpose will likely remain the foundation of intervention."
Other Studies

INTERNATIONAL ATHEROSCLEROSIS PROJECT: 31,000 autopsies from 15 countries, no correlation between animal fat intake and degree of atherosclerosis or serum cholesterol level.

Laboratory Investigations 1968 18:498

DEBAKEY STUDY: Survey of 1700 patients with atherosclerosis, found no relation between level of serum cholesterol and degree of hardening of the arteries.

VETERANS CLINICAL TRIAL: No relation between diet and CHD

MINNESOTA STATE HOSPITAL TRIAL: No difference in CHD events between controls and group on diet that lowered cholesterol by 14%.

HONOLULU HEART PROGRAM: No significant differences between fat, saturated fat and cholesterol intakes of persons with and without CHD.

PUERTO RICE HEART HEALTH STUDY: No significant differences between fat, saturated fat and cholesterol intakes of persons with and without CHD.

Uffe Ravnskov, MD, PhD, The Cholesterol Myths
The Lipid Hypothesis--
What Independent Researchers Say

"The diet-heart hypothesis has been repeatedly shown to be wrong, and yet, for complicated reasons of pride, profit and prejudice, the hypothesis continues to be exploited by scientists, fund-raising enterprises, food companies and even governmental agencies. The public is being deceived by the greatest health scam of the century."

George Mann, M.D.
Formerly Associate Director, the Framingham Project

"Whatever causes CHD, it is not primarily a high intake of saturated fatty acids."

Michael Gurr, Ph.D.
Author of definitive lipid biochemistry textbook
What is Cholesterol?

STEROL: Large sterol molecule, made by almost every cell in the body.

KEY ROLE: Makes cells waterproof so there can be a different chemistry inside and outside the cell.

HEALING: Nature's healing substance--repairs wounds, including tears in arteries.

STRUCTURE TO CELLS: Gives structural integrity or proper "stiffness" to cells, like cellulose in plants.

VITAMIN D: Precursor to Vitamin D, needed for healthy bones, calcium metabolism, reproduction, normal growth, eyesight, nervous system.

BILE SALTS: Precursor to bile salts, needed for fat digestion.

HORMONES: Precursor to vital sex hormones and protective steroids.

ANTIOXIDANT: Powerful anti-oxidant, protects against free radicals.

BRAIN AND NERVOUS SYSTEM: Essential for development and function of brain and nervous system; needed for proper functioning of serotonin receptors in the brain.
Cholesterol, The Mother of All Hormones

ACTH

Cholesterol

Pregnenolone → Progesterone

Pregnenolone → Progesterone

DHEA → Androstenedione → Estradiol

Testosterone

Corticosterone

Aldosterone

Corticosterone

11 Deoxycortisol → Cortisol

Note: Vitamin A is needed for each conversion.

Trans fats inhibit enzymes that make these conversions.
Summary of Cholesterol Research

LEVELS VARY: Cholesterol levels increase naturally and gradually with age.

ACCURATE READING DIFFICULT: Cholesterol levels vary with stress, time of day, fasting vs. non-fasting, type of test used.

RISK: In men, slightly greater risk of CHD for cholesterol levels above 300 (7.7). No appreciable difference in CHD rate for cholesterol levels of 180-300 (4.6-7.7), the vast majority. *American Heart Journal* 1987, 114, 413.

WOMEN AND ELDERLY: In women and in the elderly, no appreciable difference in CHD rate for any level of cholesterol. *In fact, for women of all ages and the elderly, higher cholesterol is associated with a longer lifespan.*
*Circulation* 86, 1026-1029, 1992, westonaprice.org/moderndiseases/benefits_cholest.html

NO CORRELATION: Autopsy studies show zero correlation between estimated animal fat intake, and degree of atherosclerosis or serum cholesterol level. *Laboratory Investigations* 1968 18:498
Summary of Cholesterol Research

LDL AND HDL? No study has shown that elevated LDL is a problem. (Since HDL has been shown to protect against CHD, and Total Cholesterol = HDL + LDL, Framingham Director Castelli claims that elevated LDL is the cause of CHD.) Ravnskov, The Cholesterol Myths

GREATER DEATHS AT LOW CHOLESTEROL: Many studies have shown that all-cause deaths, especially deaths from cancer, are higher for individuals with cholesterol levels lower than 180. Circulation 1992 86:3

OXIDIZED CHOLESTEROL: Cholesterol in natural foods does not cause heart disease—it merely spares the body from making its own cholesterol. However, altered, oxidized cholesterol from powdered milk and eggs, and from animal fats used for deep frying, may initiate the build up of pathogenic plaque. Powdered milk is often added to 1% and 2% milk and other lowfat dairy products.

Food and Nutrition News 62(2), 7-10, March/April 1990

RISKS: Cholesterol-lowering drugs do not lower risk of CHD but they increase risk of cancer, intestinal diseases, depression, suicide and violent behavior.

westonaprice.org/moderndiseases/statin.html
Risk Factors for Heart Disease

There are over 200 risk factors for heart disease including:

- Elevated L(p)a
- Type A Behavior
- Short Stature
- Elevated Uric Acid
- Low vitamin D
- Lack of Exercise
- Smoking
- Baldness
- Earlobe Creases
- Being Poor in a Rich Country
- Elevated Homocysteine
- Loss, Bereavement
- Low Birth Weight
- Elevated C Reactive Protein
- Under-active thyroid
- Obesity
- Snoring
- Hairy Chest
- Hairy Earlobes
- Being Rich in a Poor Country

AND... Elevated cholesterol in some population groups

A risk factor is not a cause!
Electron Beam Tomography

A new way of measuring calcium buildup in the arteries that

Correlates strongly with total plaque volume
Correlates strongly with degree of obstruction
Is a strong predictor of CHD events.
Figure 1. Correlation of electron beam tomography (EBT) calcium percentile and low density lipoprotein cholesterol (LDLC) in EBT+ women. 
$r = 0.06, p = 0.49$. 

Hecht HS, Superko HR. JACC 2001;37:1506-11
18 Carbon Fatty Acids

Stearic  Oleic  Linoleic  Linolenic
Modern Edible Oil Processing

Free Radicals in Processed Polyunsaturated Oils

Linoleic  Linolenic
**Arteries: The Good and the Pathological**

- **Good artery** - smooth, elastic and pink.
- **Damaged arteries** - crusty and yellowish.
- Saturated and mono-unsaturated fats do not react or harm arteries.
- Damage caused by free radicals from rancid, processed vegetable oils!
Problems Associated with Consumption of Polyunsaturated Oils

- Increased cancer
- Increased heart disease
- Increased wrinkles and premature aging
- Immune system dysfunction
- Disruption of prostaglandin production
- Depressed learning ability
- Liver damage
- Ceroid storage disease
- Damage to reproductive organs and the lungs
- Digestive disorders due to polymerization
- Increased levels of uric acid
- Impaired growth
- Lowered cholesterol

Source: Pinckney, *The Cholesterol Controversy*
NEW...made from 100% corn oil

UNSALTED MARGARINE
FOR HYPERTENSION PATIENTS

* contains only 10 mgs. of sodium per 100 grams
* contains 50% liquid corn oil and 50% partially hydrogenated corn oil
* has 30% linoleic acid—10 times that of butter

Because of the relationship of high-sodium intake to elevated blood pressure, new Fleischmann's Unsalted Corn Oil Margarine will prove to be a valuable addition to the dietary regimen of your hypertensive patients. It contains only 10 mgs. of sodium per 100 grams.

Fleischmann's Unsalted Margarine is made from 100% corn oil and contains both liquid corn oil and partially hydrogenated corn oil. Its linoleic acid content of 30% is three times higher than the 10% of regular margarines and ten times higher than the 3% of butter. This is the only unsalted margarine made from 100% corn oil.

The substitution of Fleischmann's Unsalted Corn Oil Margarine for butter or ordinary margarines in your hypertensive patients' dietary regimen has the added advantage of increasing their intake of high polyunsaturates...important because of their association with hypertension and atherosclerosis.

If your hypertensive patient needs sodium restriction, recommend Fleischmann's Unsalted. It has a light, delicate taste that he'll like. Tell him that it is available in his grocer's frozen food case.

Write now for physician booklet of 5 coupons—each coupon redeemable by your patient for 1 lb. of Fleischmann's Unsalted Margarine. Address Fleischmann's Unsalted Margarine, 425 Madison Avenue, N. Y. 22, N. Y. Distribution presently limited in some areas.

Fleischmann's
Fresh-frozen in the great foil package
in your grocer's frozen food case

AVG. DAILY INTAKE:
Two Slices of Eight Pats of Fleischmann's Corn Oil Margarine Will Supply:

- Corn Oil - Liquid
- Corn Oil - Partially Hydrogenated
- Iodine Value
- Sodium (dietetically sodium-free)
- Linoleic Acid
- Vitamin A (Adult's Need)
- Vitamin A (Child's Need)
- Vitamin D (Adult's Need and Child's Need)

ONLY UNSALTED MARGARINE
MADE FROM 100% CORN OIL
Trans Fatty Acid

Stearic Acid

(Cis) Oleic Acid

(Trans) Elaidic Acid
Diseases Caused or Exacerbated by Hydrogenated (trans) Fats

Atherosclerosis          Heart Disease          Cancer
Degeneration of Joints and Tendons
Osteoporosis          Diabetes
Autoimmune Diseases
Eczema          Psoriasis         PMS
Lowered testosterone, lowered sperm count
Failure to Grow          Learning Disabilities
Low Birth Weight Babies
Reduced Visual Acuity
Reduced Fat Content in Mothers' Milk
Junk Food Country
## Saturated Fats vs. Trans Fats

<table>
<thead>
<tr>
<th></th>
<th>Saturated Fats</th>
<th>Trans Fats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cell Membranes</td>
<td>Essential for healthy function</td>
<td>Interfere with healthy function</td>
</tr>
<tr>
<td>Hormones</td>
<td>Enhance hormone production</td>
<td>Interfere with hormone production</td>
</tr>
<tr>
<td>Inflammation</td>
<td>Suppress</td>
<td>Encourage</td>
</tr>
<tr>
<td>Heart Disease</td>
<td>Lower Lp(a). Raise “good” cholesterol</td>
<td>Raise Lp(a). Lower “good” cholesterol</td>
</tr>
<tr>
<td>Omega-3</td>
<td>Put in tissues and conserve</td>
<td>Reduce levels in tissues</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Help insulin receptors</td>
<td>Inhibit insulin receptors</td>
</tr>
<tr>
<td>Immune System</td>
<td>Enhance</td>
<td>Depress</td>
</tr>
<tr>
<td>Prostaglandins</td>
<td>Encourage production and balance</td>
<td>Depress production; cause imbalances</td>
</tr>
</tbody>
</table>
The Many Roles of Saturated Fat

CELL MEMBRANES – should be 50% saturated fatty acids.

BONES – Saturated fats help the body put calcium in the bones.

HEART DISEASE – Lower Lp(a), a marker for heart disease.

HEART FUNCTION – Saturated fats are preferred food for the heart.

LIVER – Saturated fats protect the liver from alcohol & other poisons.

LUNGS – Can’t function without saturated fats.

KIDNEYS – Can’t function without saturated fats.

IMMUNE SYSTEM – Enhanced by saturated fats.

ESSENTIAL FATTY ACIDS – Work together with saturated fats.

DETOXIFICATION – Supports body’s detox mechanisms.
The Many Roles of Short and Medium-Chain Saturated Fatty Acids

**METABOLISM** – Raise body temperature and give quick energy

**WEIGHT LOSS** – Never stored as fat; used for energy

**IMMUNE SYSTEM** – Stimulate the immune system

**INTERCELLULAR COMMUNICATION** – Help prevent cancer

**ANTI-MICROBIAL** – Kill pathogens including candida in the gut
They’re Happy
Because they eat LARD

Vitamin D in lard helps the body make neurochemicals that protect against depression.
Disease Trends and Butter Consumption

- Pounds of Butter/Capita/Year
- % of Cancer and CHD Related Deaths

- Butter Consumption
- CHD
- Cancer

Graph shows trends from 1926 to 1990.
Patients who had already had a heart attack divided into 3 groups and told to consume either

- Polyunsaturated Corn Oil
- Monounsaturated Olive Oil or
- Saturated Animal Fats

1. Corn Oil Group had 30% lower cholesterol but only 52% alive after 2 years
2. Olive Oil Group had 57% alive after 2 years
3. Animal fat Group had 75% alive after 2 years

*British Medical Journal* 1965 1:1531-33
Heart Disease and Fat Intake

“In studies conducted over 20 years... the Harvard School of Public Health showed that total fat intake bore no significant relation to Coronary Artery Disease risk. . .

Four. . . epidemiological studies have shown no evidence that men who eat less fat live longer or have fewer myocardial infarctions (MIs)”

How They Cheat!

1. Exaggerating trivial results using concept of relative risk.
2. Use of graphs with unequal intervals.
3. Leaving out data in epidemiological studies.
4. Using surrogate end points (such as cholesterol levels) rather than meaningful end points (such as death from all causes).
5. Cherry picking results to find chance correlations.
6. Changing trial’s endpoint (the final result that the study was supposed to measure) to conform to data received.
7. Determining nutrient intake with dietary recall questionnaires.
8. Poor design of food consumption studies (calling trans fats saturated fats, grouping all fats together, grouping natural and processed versions of the same food).
10. Abstracts do not accurately reflect findings.
11. Omission of contradictory studies in review articles.
Animal Fats Linked to Increase Breast Cancer Risk, Study Finds

Newspaper report on study: “Eating high-fat red meats and dairy products such as cream may increase the risk of breast cancer in pre-menopausal women. . . I would not recommend that [Atkins] diet for pre-menopausal women unless they replace red meat with poultry and fish. . . Breast cancer risk increases 58% by eating animal fat.”

\[\text{Int J Cancer 2003 Mar;}104(2):221-7\]

<table>
<thead>
<tr>
<th>Percentage Calories as Animal Fat</th>
<th>0 -14%</th>
<th>18% -21%</th>
<th>21% - 46%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chance of Getting Breast Cancer</td>
<td>0.68%</td>
<td>0.88%</td>
<td>0.73%</td>
</tr>
</tbody>
</table>

MANY FLAWS IN THE STUDY

- Twice as many smokers in group with highest animal fat compared to lowest
- Highest quintile had the greatest range (21-46%)
- Differences actually very small; could have been due to other variables.
- The highest level of animal fat had lower risk
- Levels of dietary fats determined by two dietary recall surveys (notoriously inaccurate!)
- Trivial differences reported with great hoopla in media
- Studies showing animal fats have no effect on breast cancer rates not reported
It’s all about results!
Cholesterol-Lowering Drugs

STATINS: Latest family of cholesterol-lowering drugs, called statins, acts on an enzyme, HMG-CoA Reductase, to reduce production of cholesterol in the liver.

SOLD AS Lipitor (atorvastatin), Zocor (simvastatin), Mevacor (lovastatin) and Pravachol (pravastatin)

TOXIC: Discovered by the Japanese, who found the substance to be very toxic in animal trials. Mann, Coronary Heart Disease, p 14

FDA APPROVAL: Sold their discovery to Merck, a US drug company, which got FDA approval with unexplained speed.

CANCER: In every rodent study, statins caused cancer. JAMA 1996;275:55-60

TARGETS: Currently being promoted for healthy men and women categorized as "at risk" because they have cholesterol levels over 200 (5.1).
Statin Side Effects

Fatigue and Weakness
Memory Loss and Reduced Mental Capacity
Neuropathy and Slowed Reactions
Muscle Wasting leading to Back Pain and Heart Failure
Intestinal Disease, Pancreatic Problems
Reduced Libido, Depression
Accidents, Suicide, Cancer

See: askapatient.com, search for Lipitor

HEART FAILURE: Rates of heart failure have doubled since the statins have come into use.

www.fda.gov/ohrms/dockets/dailys/02/May02/052902/02p-0244-cp00001-02-Exhibit_A-vol1.pdf

CO-Q10: Statins reduce body's production of Coenzyme Q10, which is indispensable for normal function of muscles and heart.

VITAMIN A: Statins block the absorption of vitamin A.
Poly-Neuropathy

POLYNEUROPATHY: Characterized by weakness, tingling and pain in the hands and feet as well as difficulty walking.

ASSOCIATED WITH STATINS: Researchers who studied 500,000 residents of Denmark, found that people who took statins were more likely to develop poly-neuropathy.

MORE RISK: Taking statins for one year raised the risk of nerve damage by about 15 percent—about one case for every 2,200 patients. For those who took statins for two or more years, the additional risk rose to 26 percent.

UNDER-REPORTED: Likelihood that incidence of poly-neuropathy from statin use is under-reported.

*Neurology* 2002 May 14;58(9):1321-2
20-YEAR STUDY: Researchers compared changes in cholesterol concentrations over 20 years with all-cause mortality.

LOW CHOLESTEROL, INCREASED RISK OF DEATH: “Our data accords with previous findings of increased mortality in elderly people with low serum cholesterol, and show that long-term persistence of low cholesterol concentration actually increases risk of death. Thus, the earlier that patients start to have lower cholesterol concentrations, the greater the risk of death. . . .

WORST OUTLOOK: “Those individuals with a low serum cholesterol maintained over a 20-year period will have the worst outlook for all-cause morality.” *Lancet*, 2001 358:351-55

SIMILAR FINDINGS published in the *Journal of the American Geriatrics Society*, February 2005 – seniors with low cholesterol had a greater risk of dying.
DEATH RATE THE SAME: In a meta-analysis of 44 trials involving almost 10,000 patients, the death rate was identical at 1 percent of patients in each of the three groups—those taking Lipitor, those taking other statins and those taking nothing.

ADVERSE EFFECTS: Furthermore, 65 percent of those on treatment versus 45 percent of the controls experienced an adverse event.

PATIENTS WITHDREW FROM TREATMENT: Three percent of the Lipitor-treated patients and 4 percent of those receiving other statins withdrew due to treatment-associated adverse events, compared with 1 percent of patients on the placebo.

*Am J Cardiol* 2003; 92:670-676
Important information:

LIPITOR® (atorvastatin calcium) is a prescription drug used with diet to lower cholesterol. LIPITOR is not for everyone, including those with liver disease or possible liver problems, women who are nursing, pregnant, or may become pregnant. LIPITOR has not been shown to prevent heart disease or heart attacks.
If it ain't cholesterol, what causes heart disease?
Other Theories Proposed to Explain CHD Epidemic

Price      Deficiency of fat-soluble vitamins A and D
Yudkin, Ahrens    Refined carbohydrates
Kummerow, Mann   Trans fatty acids from hydrogenated fats
Hodgson          Excess omega-6 from refined vegetable oils
Addis             Oxidized cholesterol and oxidized fats (free radicals)
Shute              Vitamin E deficiency
Pauling           Vitamin C deficiency
McCully          Deficiency of folic acid, B6 and B12
Webb             Protein deficiency
Anderson         Magnesium deficiency
Huttunen        Selenium deficiency
Klevay          Copper Deficiency
Geliejnse       K2 Deficiency
If it ain't cholesterol, what causes heart disease?

**More Theories Proposed to Explain CHD Epidemic**

<table>
<thead>
<tr>
<th>Author</th>
<th>Theory</th>
</tr>
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<tbody>
<tr>
<td>Annand</td>
<td>Heated milk protein</td>
</tr>
<tr>
<td>Oster</td>
<td>Homogenization</td>
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<tr>
<td>Ellis</td>
<td>Microbial agents (viruses, bacteria)</td>
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<tr>
<td>Benditt</td>
<td>Monoclonal tumor theory</td>
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<tr>
<td>Gofman</td>
<td>Exposure to x-rays</td>
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<td>de Bruin</td>
<td>Thyroid deficiency</td>
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<td>LaCroix</td>
<td>Coffee consumption</td>
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<td>Morris</td>
<td>Lack of exercise</td>
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<td>Stern</td>
<td>Exposure to carbon monoxide</td>
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<td>Purdey</td>
<td>Exposure to pesticides</td>
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<td>Ridker</td>
<td>Inflammation</td>
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<tr>
<td>Marmot</td>
<td>Stress</td>
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<tr>
<td>Ravnskov</td>
<td>Infection</td>
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<tr>
<td>de Mesquita</td>
<td>Acidosis of the Heart</td>
</tr>
<tr>
<td>Barker</td>
<td>Low Birth Weight</td>
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<tr>
<td>Smith</td>
<td>Changes &amp; fashions in reporting cause of death</td>
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</tbody>
</table>
Heart Disease Study by Weston Price
Deaths from Heart Attacks & Pneumonia versus Fat-Soluble Vitamins in Local Butterfat in 16 Districts

Upper Line (Parabola): Hours of sunlight
Dotted Line: Fat-Soluble Activators in Local Butterfat
Solid Line: Deaths from Heart Attacks & Pneumonia in Local Hospitals
Sources of Vitamins A, D and K

SEAFOODS
- Fish Eggs
- Fish Livers
- Fish Liver Oil
- Fish Heads
- Shell Fish
- Oily Fish
- Sea Mammals

LAND ANIMALS
- GRASS-FED!
- Insects
- Butter and Cream
- Egg Yolks
- Liver, Organ Meats
- Animal Fat
  (Especially mono-gastric animals such as birds, pig, bear, Guinea pig)
The Cholesterol-CHD Theory
Who Profits?

Cholesterol Testing and Treatment $100 billion/yr

Hydrogenated Fats & Fabricated Foods $150 billion/yr

Cancer & Other Diseases Caused by Hydrogenated Fats $100 billion/yr

Growth Failure and Learning Disabilities in Children $70 billion/yr
Recipe for a Health Care Crisis  
(and Enormous Profits)

INGREDIENTS:

- greed
- envy
- ignorance
- manipulation
- cunning
- extortion
- lies
- fraud

INSTRUCTIONS:

1. Conspire to convince the populace that the natural whole foods that have nourished mankind for millennia (such as eggs, butter, whole raw milk and red meat) are dangerous and unhealthy.

2. Train the medical profession to advocate antibiotics, vaccinations, fluoride and fabricated foods as scientifically proven methods for preventing illness.

3. Ignore or suppress healing methods that work; claim that real diseases have no cure or do not exist.

4. Define normal human conditions such as menopause and average cholesterol levels as illnesses which must be treated with expensive drugs that create serious side-effects.

Stew, broil, half-bake or boil as occasion requires. Serves 300,000,000.
Resources

Many articles on cholesterol, fats and heart disease at westonaprice.org

See also: cholesterol-and-health.com
www.ravnskov.nu/cholesterol.htm
Books from NewTrends Publishing
www.newtrendspublishing.com, (877) 707-1776
Know Your Fats
Mary G. Enig, PhD

Bethesdapress.com
Traditional Diet Seminar on DVD


Five-Hour Seminar on Nourishing Traditional Diets

3-DVD Set

$69.95
Dr. Price’s Pioneering Work

The Price-Pottenger Nutrition Foundation

www.price-pottenger.org

(619) 462-7600
Summary of Dietary Principles

Traditional diets *maximized* nutrients while modern diets *minimize* nutrients

<table>
<thead>
<tr>
<th>TRADITIONAL DIETS</th>
<th>MODERN DIETS</th>
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<tbody>
<tr>
<td>Foods from fertile soil</td>
<td>Foods from depleted soil</td>
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<tr>
<td>Organ meats over muscle meats</td>
<td>Muscle meats, few organs</td>
</tr>
<tr>
<td>Animal fats</td>
<td>Vegetable oils</td>
</tr>
<tr>
<td>Animals on pasture</td>
<td>Animals in confinement</td>
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<tr>
<td>Dairy products raw and/or fermented</td>
<td>Dairy products pasteurized</td>
</tr>
<tr>
<td>Grains and legumes soaked/fermented</td>
<td>Grains refined, extruded</td>
</tr>
<tr>
<td>Bone broths</td>
<td>MSG, artificial flavorings</td>
</tr>
<tr>
<td>Unrefined sweeteners (honey, maple syrup)</td>
<td>Refined sweeteners</td>
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<tr>
<td>Lacto-fermented vegetables</td>
<td>Canned vegetables</td>
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<tr>
<td>Lacto-fermented beverages</td>
<td>Modern soft drinks</td>
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<tr>
<td>Unrefined salt</td>
<td>Refined salt</td>
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<tr>
<td>Natural vitamins in foods</td>
<td>Synthetic vitamins added</td>
</tr>
<tr>
<td>Traditional Cooking</td>
<td>Microwave, Irradiation</td>
</tr>
<tr>
<td>Traditional seeds/Open pollination</td>
<td>Hybrid seeds, GMO seeds</td>
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