Cholesterol
September 7, 2018

Ancel Keys (1904 – 2004) was a physiologist and University of Minnesota researcher responsible for the lipid hypothesis that made a connection between blood cholesterol levels and dietary cholesterol. Ancel first presented his hypothesis at a meeting of the World Health Organization in Geneva in 1955. The lipid hypothesis helped promote vegetable oil and statin drugs. The theory also harmed the egg and dairy industries. According to the USDA publication, The U.S. Soybean Industry (1988), the U.S. soybean production has increased sevenfold since 1950, making soybeans the second highest valued crop after corn. According to Financial Times Magazine, before the patent expired in 2011, Pfizer's Atorvastatin, known by its brand name, Lipitor, was the best-selling drug in the history of pharmaceuticals.

2. The fall of the world's best-selling drug, Andrew Jack, FT Magazine, November 27, 2009, https://www.ft.com/content/d0f7af5c-d7e6-11de-b578-00144feabdc0

Ancel Keys’ lipid hypothesis has since been reevaluated and discredited as reflected in the following articles:


Abstract:
PURPOSE OF REVIEW:
The perceived notion that dietary cholesterol is associated with increased risk for coronary heart disease (CHD) has led to dietary recommendations of no more than 300 mg/day for healthy populations in the USA. This study will review the recent evidence that challenges the current dietary restrictions regarding cholesterol while it presents some beneficial effects of eggs (an icon for dietary cholesterol) in healthy individuals.

2.) Why You Should No Longer Worry About Cholesterol in Food
Cleveland Clinic
February 19, 2015
By Heart and Vascular Team

P2Namara DJ.
Abstract
The misperception that dietary cholesterol determines blood cholesterol is held by many consumers in spite of evidence to the contrary. Many studies reported over the past 2 years have shown that dietary cholesterol is not a significant factor in an individual's plasma cholesterol level or cardiovascular
disease (CVD) risk. Reports from the Lipid Research Clinics Research Prevalence Study and the Framingham Heart Study have shown that dietary cholesterol is not related to either blood cholesterol or heart disease deaths. In a similar manner, 10 clinical trials (1994 to 1996) of the effects of dietary cholesterol on blood lipids and lipoproteins indicate that addition of an egg or two a day to a low-fat diet has little if any effect on blood cholesterol levels. This observation was noted in young men and women with normal cholesterol levels as well as older subjects with elevated plasma cholesterol concentrations. The consistency of the clinical and the epidemiological data demonstrating that dietary cholesterol has little effect on plasma cholesterol in most individuals raises a number of questions regarding the justification of population wide restrictions on dietary cholesterol intake and egg consumption.


Dietary cholesterol and atherosclerosis.
McNamara DJ.
Abstract
The perceived relationship between dietary cholesterol, plasma cholesterol and atherosclerosis is based on three lines of evidence: animal feeding studies, epidemiological surveys, and clinical trials. Over the past quarter century studies investigating the relationship between dietary cholesterol and atherosclerosis have raised questions regarding the contribution of dietary cholesterol to heart disease risk and the validity of dietary cholesterol restrictions based on these lines of evidence. Animal feeding studies have shown that for most species large doses of cholesterol are necessary to induce hypercholesterolemia and atherosclerosis, while for other species even small cholesterol intakes induce hypercholesterolemia. The species-to-species variability in the plasma cholesterol response to dietary cholesterol, and the distinctly different plasma lipoprotein profiles of most animal models make extrapolation of the data from animal feeding studies to human health extremely complicated and difficult to interpret. Epidemiological surveys often report positive relationships between cholesterol intakes and cardiovascular disease based on simple regression analyses; however, when multiple regression analyses account for the colinearity of dietary cholesterol and saturated fat calories, there is a null relationship between dietary cholesterol and coronary heart disease morbidity and mortality. An additional complication of epidemiological survey data is that dietary patterns high in animal products are often low in grains, fruits and vegetables which can contribute to increased risk of atherosclerosis. Clinical feeding studies show that a 100 mg/day change in dietary cholesterol will on average change the plasma total cholesterol level by 2.2-2.5 mg/dl, with a 1.9 mg/dl change in low density lipoprotein (LDL) cholesterol and a 0.4 mg/dl change in high density lipoprotein (HDL) cholesterol. Data indicate that dietary cholesterol has little effect on the plasma LDL:HDL ratio. Analysis of the available epidemiological and clinical data indicates that for the general population, dietary cholesterol makes no significant contribution to atherosclerosis and risk of cardiovascular disease.


Dietary cholesterol and cardiovascular disease: a systematic review and meta-analysis.
Berger S1, Raman G1, Vishwanathan R2, Jacques PF2, Johnson EJ3.
Abstract
BACKGROUND:
Dietary cholesterol has been suggested to increase the risk of cardiovascular disease (CVD), which has led to US recommendations to reduce cholesterol intake.
OBJECTIVE:
The authors examine the effects of dietary cholesterol on CVD risk in healthy adults by using
systematic review and meta-analysis.

**DESIGN:**
MEDLINE, Cochrane Central, and Commonwealth Agricultural Bureau Abstracts databases were searched through December 2013 for prospective studies that quantified dietary cholesterol. Investigators independently screened citations and verified extracted data on study and participant characteristics, outcomes, and quality. Random-effect models meta-analysis was used when at least 3 studies reported the same CVD outcome.

**RESULTS:**
Forty studies (17 cohorts in 19 publications with 361,923 subjects and 19 trials in 21 publications with 632 subjects) published between 1979 and 2013 were eligible for review. Dietary cholesterol was not statistically significantly associated with any coronary artery disease (4 cohorts; no summary RR), ischemic stroke (4 cohorts; summary RR: 1.13; 95% CI: 0.99, 1.28), or hemorrhagic stroke (3 cohorts; summary RR: 1.09; 95% CI: 0.79, 1.50). Dietary cholesterol statistically significantly increased both serum total cholesterol (17 trials; net change: 11.2 mg/dL; 95% CI: 6.4, 15.9) and low-density lipoprotein (LDL) cholesterol (14 trials; net change: 6.7 mg/dL; 95% CI: 1.7, 11.7 mg/dL). Increases in LDL cholesterol were no longer statistically significant when intervention doses exceeded 900 mg/d. Dietary cholesterol also statistically significantly increased serum high-density lipoprotein cholesterol (13 trials; net change: 3.2 mg/dL; 95% CI: 0.9, 9.7 mg/dL) and the LDL to high-density lipoprotein ratio (5 trials; net change: 0.2; 95% CI: 0.0, 0.3). Dietary cholesterol did not statistically significantly change serum triglycerides or very-low-density lipoprotein concentrations.

**CONCLUSION:**
Reviewed studies were heterogeneous and lacked the methodologic rigor to draw any conclusions regarding the effects of dietary cholesterol on CVD risk. Carefully adjusted and well-conducted cohort studies would be useful to identify the relative effects of dietary cholesterol on CVD risk.

6.)
**Research**
**Re-evaluation of the traditional diet-heart hypothesis: analysis of recovered data from Minnesota Coronary Experiment (1968-73)**
*BMJ* 2016; 353 doi: https://doi.org/10.1136/bmj.i1246 (Published 12 April 2016)
Cite this as: *BMJ* 2016;353:i1246
https://www.bmj.com/content/353/bmj.i1246

7.)
**Financial Post**
June 11, 2012
Cholesterol: How a now discredited diet theory became a national mania
*After years of treating cholesterol like a dietary boogeyman, health experts recently eased their warnings. Here's a look at the folly behind our fear of fat*

**Resources for correct dietary information:**
Weston A. Price Foundation (WAPF)
Founded 1999
Washington, D.C.
Worldwide network of local chapters
Book Reviews
Publications: Books and Articles as well as Wise Traditions Magazine (included with a membership)
Examples (not sold by the Foundation):
Nourishing Traditions®: The Cookbook that Challenges Politically Correct Nutrition and the Diet Dictocrats, 2001, by Sally Fallon, President, WAPF and Dr. Mary Enig
Eat Fat Lose Fat, 2006, by Sally Fallon, President, WAPF and Dr. Mary Enig
The Cholesterol Myths: Exposing the Fallacy That Saturated Fat and Cholesterol Cause Heart Disease, 2002 by Dr. Uffe Ravnskov
http://westonaprice.org

Price Pottenger Nutrition Foundation (PPNF)
Founded 1969
Lemon Grove, CA
Publications: Books and Articles
Examples:
Nutrition and Physical Degeneration, Dr. Weston A. Price, D.D.S.
Pottenger's Cats: A Study in Nutrition, Dr. Francis M. Pottenger
Root Canal Cover-Up, Dr. George Meinig, D.D.S.
https://price-pottenger.org