

CHOLESTEROLS' ROLE IN HEALTH BEING QUESTIONED BY NEW EVIDENCE RELATING TO DENTAL MATERIALS

EXECUTIVE SUMMARY

Investigations regarding the effects of dentistry's common silver-mercury amalgam fillings revealed changes in many biological parameters. One of the most surprising was the study sponsored by the Adolph Coors Foundation examining hundreds of blood chemistries. Cholesterol levels were altered by the presence and subsequent removal of these mercury containing dental fillings.

This discovery led to investigations of people's chemistries outside the Coors study as well as reviewing the scientific and medical literature. What was discovered was nothing less than astonishing: what the general public was being told as facts in advertising as reasons to lower cholesterol was directly opposed to what had been proved in science.

The study results of 'silver' amalgam fillings altering cholesterol levels were unexpected. However, it led to the discovery that we as consumers are being duped into something detrimental to health. The Toxic Element Research Foundation's purpose is to generate awareness in research and the public about potential toxicity in areas not generally suspect. Searching through the medical literature has revealed that there is no bad cholesterol, and that cholesterol is one of our primary protectors. TERF's research adds to this the missing link: cholesterol elevations are the result of efforts of our liver to assist in detoxification of dental mercury.

Due to the controversial nature of this material, multiple references and quotations are cited.

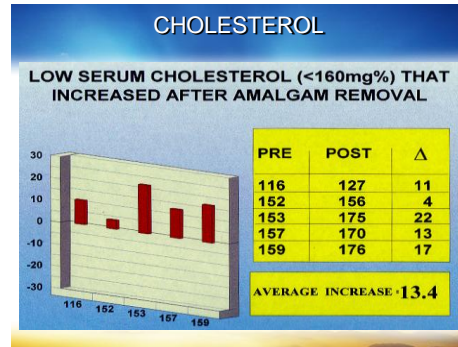
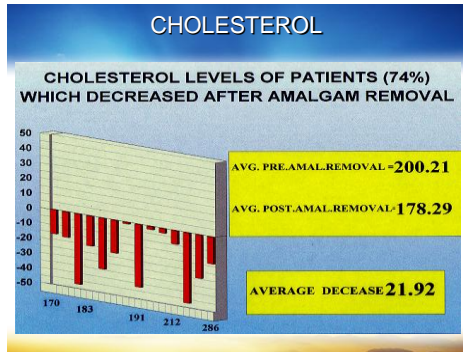
CHOLESTEROL STUDIES STIMULATED BY DENTAL MATERIALS

The national awareness of cholesterol and worries related to elevated levels has risen to epidemic proportions. Almost everyone is aware of their individual levels and concerned about the foods they are consuming and which way their cholesterol are heading. But should they be? Is it food levels that are influencing these movements? And are today's levels actually harmful?

These are questions that were raised during early investigations of the effects of toxic materials in patient's mouths. One of the results showed that dental fillings influenced serum cholesterol levels.

In 1996 and 1997 the Adolph Coors Foundation sponsored a study correlating the presence of dental silver-mercury amalgams with a large number of blood and other body chemistries. These patients were limited to having only dental silver colored mercury amalgam as filling materials in their mouths. No root canals, no crowns, no metallic partial dentures. "Having decades of experience with thousands of chemistries, I thought I could anticipate the results," related TERF's spokesman Dr. Hal Huggins, "and for the most part, I did. However I had no idea that silver (colored) fillings (50% mercury) – the most common dental filling in the world – influenced fasting cholesterol levels. Why would that be?" This led to a concerted effort of research within the scientific literature, medical literature, and to actual patient's records.

The following graphs from the original Coors Study show what prompted this research:



There was a trend for high cholesterol levels to come down, as well as low cholesterol levels to go up after dental revision involving only dental amalgam. Both trended to what is known as the stability point, or that point of maximum protection.

Based on these findings, an investigation was started to determine the difference between “good” and “bad” cholesterol. Chemically, there is no difference. The HDL, or high density cholesterol is just packed together tighter. Actually, it is mostly the bad cholesterol that creates the positive comments in the following studies. In point of fact, what is called ‘bad’ cholesterol makes hormones and serotonin.

And this, it turns out, is very important.

SCIENTIFIC LITERATURE REVIEW

What does the literature have to say about cholesterol? Because of the controversial nature of this topic, I am including a superfluous abundance of documentation. Strangely, most of what I found could be classified as ‘of benefit’.

Benefit:

As it turns out, cholesterol is one of our primary *defenders*, not *offenders*. A really top notch detoxifier. Among its attributes is the fact that it provides great protection against most anaerobic (the really bad ones) bacteria, like even the very

powerful *Clostridium perfringens*. This bacteria produces the fatality-bent toxins formed during food poisoning.

Biochemistry Biophysics Acta, Aug 1992

Benefit:

Cholesterol inactivates or inhibits bacterial “hemolytic activity” (boring holes into red blood cells, such that the contents leak out, producing death of the cell). This is particularly notable in the microbe *Mycoplasma pulmonis*.

FEMS Microbiol Letter, May 1995 128 (2): 213-18.

Benefit:

Cholesterol was found to detoxify a very potent poison called *cholera* toxin. A rather complex reaction, but it detoxifies a toxin that is lethal to humans. Pretty powerful protector.

Biochemistry Mar 12, 1991, (10) p 2563-70

These are not the only benefits that cholesterol offers. Red blood cells are 7 microns in diameter (quite small), yet they slither through capillaries that are only 5 *microns* in diameter. How can they do that? They fold and bend upon themselves – provided they have 23% cholesterol in their outer membranes. Lower than that, and the red blood cells lose their flexibility, becoming lodged in the capillaries, creating little mini-strokes.

Diet was the first issue that was recommended to reduce “bad” cholesterol. This has not been very successful. Dietary intervention yielded an average of 3.3 mg% drop by reducing fat intake. Interesting that the laboratory variation in single samples is 5%. That means that the testing variance is greater than the drop supposedly due to reduction of fat intake.

Editorial JAMA Vol. 273, No. 18, p 1461

Benefit:

Cholesterol is the basic molecule in formation of other essential bio-chemicals. Is happiness worthy of pursuit? You cannot achieve happiness unless you have adequate serotonin. Serotonin I call the *happiness hormone*, but it is really a neuropeptide. Happiness hormone describes its activity better. Happiness is directly related to the amount of serotonin present – and guess what controls serotonin manufacture? Cholesterol.

Without serotonin, aggressive behavior is more common. Even in animals. In an eight month long monkey study, it was found that “monkeys with cholesterol levels *lower than 200 mg% were far more aggressive and hostile* than those on a cheeseburger-like diet with high cholesterol levels of 600 mg%.

Spinal taps revealed low-cholesterol (aggressive monkeys) had far *less serotonin* than high cholesterol non-aggressive monkeys.

Psychology Today – May 1995

In a Honolulu 23 year study of 7309 people, a link was found between low fat diets and aggressive conduct. Violent behavior was reported in low cholesterol homicidal offenders.

Archives of Internal Medicine (AMA) Apr 10 1995, Vol 155 No.7 p 695.

A future prediction was made by author D.A. Johnson. “Interventions to reduce cholesterol concentrations on a large scale could lead to a population shift to a more violent pattern of behavior, which would result not in death, but in more aggression at work and at home, more abuse of children, and partners, and generally more unhappiness.”

Molecular Pharmacology 1979; 15: 739-46

There are, of course, critics of low cholesterol studies. Critics from the FDA said of the “Helsinki Study” of 4081 men regarding homicide and suicide, “no

significant association was detected between low cholesterol levels and traumatic death, even though *the incidence of traumatic deaths due to low cholesterol was 300% greater than for suicide.*” It might be of interest to note that the suicide rate was 250% higher than anticipated in this study.

I found sick humor in the FDA critic’s statement that the “suicide study was flawed because 5 out of the 8 dropped out of the study.” What do you expect dead people to do?

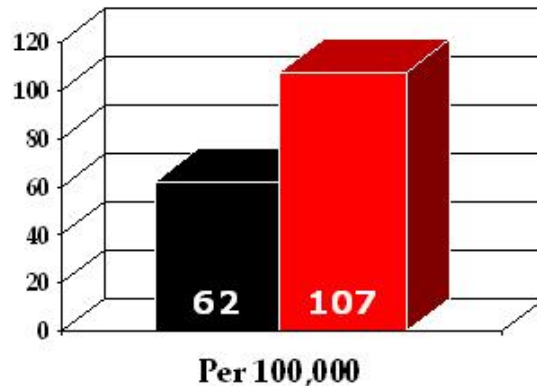
McCormick, JS, Gemfibrezil and Coronary Heart Disease, N Engl J. Med. May 12, 1988 318: 1274-1275.

As was pointed out, “Since the incidence of suicide is high in adolescents, those with low cholesterol will have already died, thus skewing the results of adult studies.”

Proceedings of the Natl Academy of Science Vol. 77

Some studies included death from motor vehicles, homicides and suicide in the same groupings. Of these, in the 45 – 54 year old age group, there were 62 deaths per 100,000 in higher cholesterol people. In the drug intervention groups with lower cholesterol and statin drugs, the average death rate was 107 per 100,000.

British Medical Journal 11 Aug 1990



Separating out deaths due to injury, in studies of 70,000 deaths, there was a 35% higher death rate due to injury in individuals with cholesterol levels below 160 mg%

Circulation, Vol 86, 1992, p 1046-1060

That is rather depressing. And, speaking of depression:

In an article from England, Dr. Brown references “low cholesterol” as being under 160 mg%. He concludes, “in both men and women, the lower the cholesterol, the more severe the depression.” “Severe depression” is medically defined as “life-threatening, wherein the patient is contemplating suicide.”

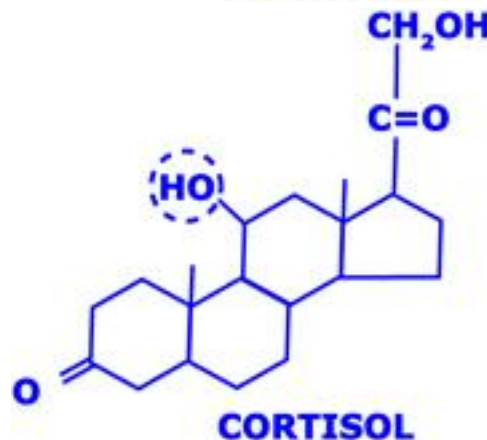
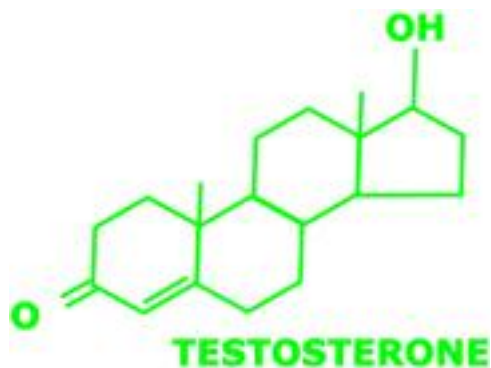
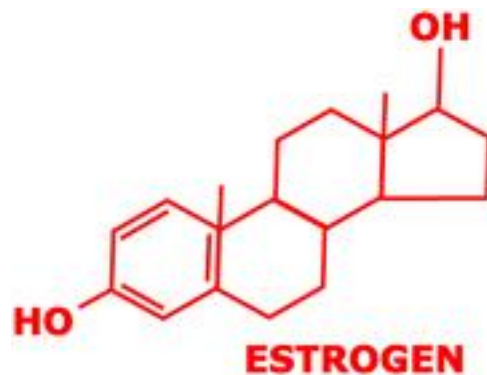
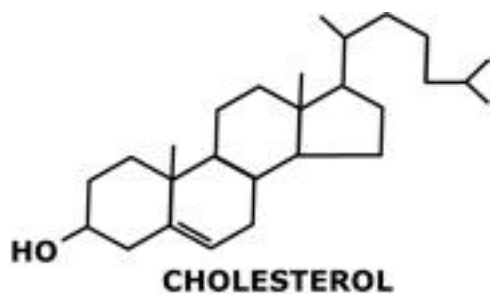
British Medical Journal, May 21 1994

Older men seemed to have more problems with depression than younger. Men over the age of 70 had 6,700% *greater risk* of depression when cholesterol levels *were less than 160 mg%* than men with cholesterol *over* 160 mg%

The Lancet Vol. 341; No. 8837, Jan 9, 1993, p 75.

And don't forget the well known fact that estrogen, testosterone, cortisol, and most of the adrenocortical hormones are derivatives of cholesterol. Just a small additional molecule added or removed changes one hormone to another – all based on the original cholesterol molecule.

General biochemistry text knowledge



In “mortality” studies, or death by all causes, a W.H.O. study of 6582 patients in cholesterol lowering drug trials, found a 44% increase in overall mortality in those patients taking statin (cholesterol lowering) drugs.

In studies of 754,385 patients, the highest mortality rate was found in the BOTTOM ¼ of the cholesterol levels.

British Medical Journal, Aug 1990

Cancer took a big hit with cholesterol studies. “In a review of 33 articles covering 26,000 patients, low cholesterol due to drug intervention conducted over a 5 year period produced 70% higher cancer mortality. Number one was colon cancer.

Cancer Causes and Control, 2, 253-261, 1991 (a review article)

“26% excess deaths due to cancer was found in those taking lipid lowering drugs.”
Annual Review of Nutrition 1992

“A 50% increase in death due to cancer was noted in women undergoing Hormone Replacement Therapy.”

J. American Medical Association, June 2001

And here was another interesting article:

“In reviewing 33 studies, we determined that a 7 mg% reduction in cholesterol resulted in a **70% increase in cancer risk.**”

And the best part was the conclusion:

“This does **not justify concern** that lowering serum cholesterol might cause cancer.”

Cancer Causes and Cures – Vol. 2 1991

Another confusing article, relative to its conclusion:

“In the Krutchevsky Study of 25,269 patients, there were 26% excess cancer deaths in trials using lipid lowering drugs.”

Follow the logic of the rebuttal:

“Even though routine use of maximally tolerated doses (*of statin drugs*) results in an increase in cell division and cellular mutations, the actual excess risk of cancer mortality is remote.” [No references offered]

Journal of the Amer Medical Assoc, Jan 1996

Who is recommending lowering cholesterol, and why? Who is the National Cholesterol Educational Program (NCEP) that is responsible for dictating cholesterol levels to physicians? It is an organization of 14 experts on cholesterol approved by 22 medical societies and the AMA.

Their stated goal: “To increase the number of Americans taking statin drugs from 13 million to 36 million. They also recommend, “Consider drug therapy in children age 10 and older if 6 to 12 months of diet does not reduce cholesterol.”

How is the NCEP received by others? About their publication called “Guidelines”, it is said, “Falls short of established standards” (for publication). J Amer Med Assoc, 1999. “Only one out of the 20 established guidelines meets established standards of quality.” The Lancet, 2000. “4 out of 5 guidelines did not reflect the best scientific evidence available to them.” Brit Columbia Health Technology Assessment.

Dr. Richard Pasternak was appalled by an air force publication called the AFCAPS study on 6600 people. It’s conclusion was, “The death rate was higher on people on statins than on placebos.” Pasternak, chairman of the NCEP Guideline committee retaliated: “Physicians might be tempted to conclude that this large study demonstrates that statins do not work, however, it is well known that they do.”

Later, he had to disclose that he received financial remunerations from NINE statin drug manufacturing companies.

(Quoted from ‘Overdo\$ed America’ by Abramson). In fact, of the 14 experts of the expert panel, ALL experts averaged MORE than 10 such financial relationships.

To put yourself in place as far as age is concerned; the paid Expert Panel recommends “aggressive” drug therapy for the elderly. Elderly was defined as “over age 45”.

Then, there is the grandfather of all cholesterol studies, the Framingham Study. In this study practically the whole town of Framingham Mass was studied for about 30 years. As his conclusion, the head of this investigation, Dr. William Castelli, MD warned:

“After age 50, incidence of death from heart disease

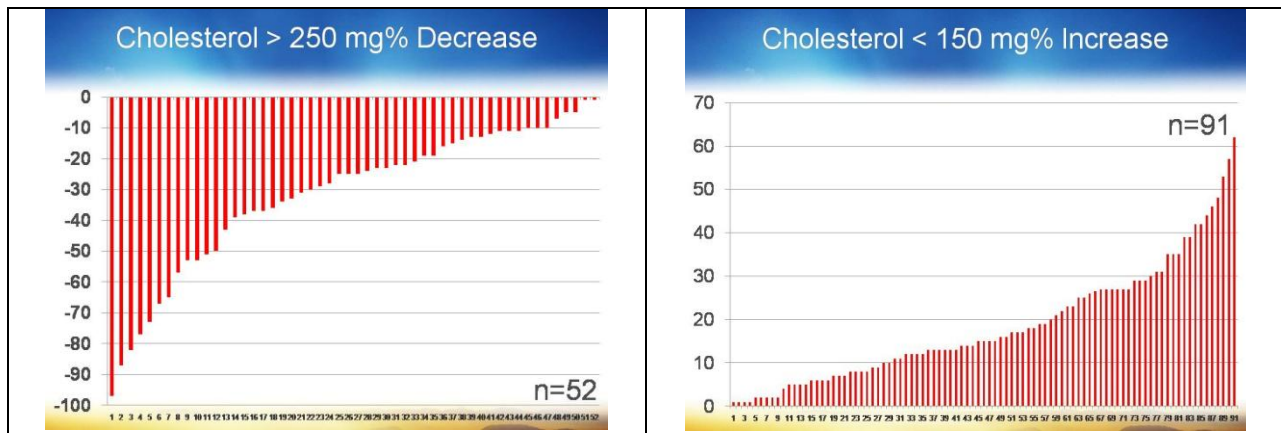
Increases in both men and women with cholesterol levels less than 160 mg%.

He also stated that “we have just as many men and women who get a heart attack at under 200 total cholesterol as over 300.”

Is it “smart” to lower one’s cholesterol? As far as smart is concerned, 25% of the brain is composed of cholesterol. In fact, about 50% of the total weight of the brain is fat. Cholesterol is the most common organic molecule in the brain. Lowering cholesterol leads to a reduction in cognitive function in people taking statin drugs.

Heron - Proc Nat’l Academy of Science, 1980

Let’s look at some actual cases of cholesterol level changes as they are influenced by dental toxins. These two graphs show the trends for higher cholesterol levels (above 240 mg %) versus “low cholesterol levels (less than 150mg %).



Although it may seem amazing that dental fillings started this investigation, if you recognize cholesterol as a primary detoxifier, it becomes logical that cholesterol would react to the presence/removal of mercury filled amalgam fillings. This inadvertent marker is what led to TERF’s investigation.

CONCLUSION

The Toxic Element Research Foundation believes that the public has been misled into believing that dangerously lower cholesterol levels may provide beneficial results to their health and well being. This is simply not supported by the medical literature nor actual patient studies.

TERF is calling on the medical research community to tell the truth about cholesterol and for advertisers to stop immediately misinforming the general public about this important issue.

About Toxic Elements Research Foundation

TERF, a non-profit research foundation, is dedicated to stimulating interest in the research community as well as informing the public to become aware of potential problems associated with dental materials and procedures. Informed consent of potential problems makes for better informed decisions by the patient – especially where health is at risk.