

## **Amalgam (Silver) Fillings**

**Summaries of the latest research concerning  
amalgam fillings  
By Hans R. Larsen MSc ChE**

### **Mercury sources and toxicity**

ROCHESTER, NEW YORK. Mercury is a highly toxic metal associated with damage to the kidneys and central nervous system. Mercury vapour is emitted from volcanoes, coal-burning power stations, and municipal incinerators and returns to the earth through rain contaminated with metallic mercury. Metallic mercury is methylated to methyl mercury in oceans and lakes and enters the food chain via fish and other seafood. Long-lived predator fish such as shark, swordfish, tilefish, king mackerel, and pike and bass in fresh water are the main sources of methyl mercury. Dental amalgams are an important source of mercury vapour and the vaccine preservative thimerosal is a significant source of ethyl mercury.

Researchers at the University of Rochester School of Medicine recently published a review of what is currently known about mercury toxicity. Among the highlights:

- Mercury vapour, methyl mercury and ethyl mercury all target the central nervous system and mercury vapour and ethyl mercury also target the kidneys. Inorganic (metallic) mercury primarily targets the kidneys and stomach.
- Chelators such as DMSA are effective in removing all forms of mercury from the body, but cannot reverse central nervous system damage.
- The allowable or safe intake of mercury has recently been reduced to 0.1 microgram/day per kilogram of body weight.
- The concentration of mercury in the brain, blood and urine correlates with the number of amalgam fillings in one's mouth. The concentration increases markedly with increased chewing. Long-term use of nicotine gum by people with amalgam (silver) fillings may increase levels by a factor of 10, thus approaching occupational safety limits.
- There is concern, but no clear evidence, that mercury emitted from amalgam fillings may cause or worsen degenerative diseases such as ALS, Alzheimer's disease, multiple sclerosis, and Parkinson's disease.
- Ethyl mercury (thimerosal) is used as a preservative in vaccines. Recent concerns about its toxicity have caused US authorities to take steps to remove it by switching from multi-dose vials to single-dose vials that do not require a preservative.
- A recent move by power companies to replace mercury containing pressure-control devices for domestic gas supplies has led to numerous spills of mercury in homes. Some 200,000 homes were affected in one recent incident. The liquid mercury is difficult to remove and gives off highly toxic vapours, which are particularly harmful to infants and children.
- Several studies have found an association between mercury exposure and

cardiovascular disease, but other studies have failed to confirm the connection.

*Clarkson, Thomas W., et al. The toxicology of mercury – current exposures and clinical manifestations. New England Journal of Medicine, Vol. 349, October 30, 2003, pp. 1731-37*

**Editor's comment:** The review makes it clear that exposure to mercury is detrimental, but hard to avoid. Nevertheless, avoiding the placement of new amalgam dental fillings and gradually replacing old ones with composite fillings, avoiding gum chewing if amalgam fillings are present, and limiting the intake of fish with high mercury levels are all steps that can be taken by everyone. It is important to realize that consuming just one 7 oz (198 grams) can of tuna per week translates into a mercury intake of 0.1 microgram/day of mercury per kilogram of body weight – equivalent to the currently recommended maximum daily intake.

### **ADA fighting the mercury battle**

GAITHERSBURG, MARYLAND. The American Dental Association (ADA) has launched an advertising campaign to discourage patients from having their amalgam (silver) fillings removed. Many patients and sometimes even their physicians believe that mercury, the main component of amalgams, plays a role in promoting such varied diseases as Alzheimer's, multiple sclerosis, and autism. The ADA says the evidence is not there and their Code of Ethics forbids dentists from advising their patients that there could be a link. Scientists at the University of Milan disagree with the ADA and point out that several studies have confirmed that mercury from amalgam dental fillings does enter tissues and that the mercury content of brain, thyroid, kidney, and pituitary gland tissue is proportional to the number of amalgam fillings. They conclude that the health effects of amalgam fillings are not at all clear and need further investigation. German researchers point out that some of the composite materials used in the replacement of amalgam fillings may in themselves be toxic.

*Larkin, M. Don't remove amalgam fillings, urges American Dental Association. The Lancet, Vol. 360, August 3, 2002, p. 393*

*Guzzi, G, et al. Should amalgam fillings be removed? The Lancet, Vol. 360, December 21/28, 2002, p. 2081*

**Editor's comment:** Mercury and removed amalgam fillings are classified as hazardous materials and require extreme caution in disposal. Why they would be hazardous outside the mouth, but not inside defies comprehension. It is also a scientifically proven fact that the blood level of mercury is twice as high in dentists as in non-dentists. This fact and the fact that savvy patients don't want mercury in their mouths is no doubt what is leading many dentists to put a, albeit discrete, sign in their waiting rooms "Mercury-free practice"!

### **Fish, mercury, and heart disease**

BALTIMORE, MARYLAND. Several studies have shown that regular fish consumption protects against cardiovascular disease. Other studies have shown that consuming mercury-contaminated fish increases the risk of coronary heart disease. The beneficial effect of fish consumption is believed to be due to the presence of the omega-3 fatty acids, eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) in the tissue of fish and shellfish. Two recent studies have attempted to answer the question "Are the beneficial effects of fish oils (EPA and DHA) outweighed by the negative effects of mercury"?

The first study, carried out by a team of researchers from eight European countries, Israel and the United States, involved 684 men who had suffered a first non-fatal heart attack and 724 matched controls. All participants had their mercury level measured in toenail clippings and their level of DHA measured in a fat tissue sample taken from the buttock. Participants with a mercury level of 0.66 mcg/gram were found to have twice (odds ratio of 2.16) the risk of having a first heart attack when compared with participants having a mercury level of 0.11 mcg/gram. This risk assessment was arrived at after adjusting for age, DHA level in adipose tissue, body-mass index, waist:hip ratio, smoking status, alcohol intake, HDL cholesterol level, diabetes,

history of hypertension, family history of heart attack, blood levels of vitamin E and beta-carotene, and toenail level of selenium.

The research team also found that participants with a high (0.44% of total fatty acids) fat tissue content of DHA had a 41% lower risk of having a first heart attack than did those with a low (0.10% of total fatty acids) fat tissue level of DHA. This risk assessment was arrived after adjusting for all other known risk factors including toenail mercury level.

The researchers point out that the main sources of mercury are occupational exposure (dentists), exposure to silver-mercury amalgam in dental fillings, and fish consumption. They conclude that the health benefit of fish consumption is significantly diminished if the fish is high in mercury. They also confirm the cardioprotective effect of fish oils (DHA).

The second study was part of the Health Professionals Follow-Up Study begun in 1986 as a cooperative venture between the Harvard School of Public Health, the Brigham and Women's Hospital, and Harvard Medical School. The study involved 33,737 male health professionals who had toenail clippings analyzed for mercury in 1987. After 5 years of follow-up 470 participants had been diagnosed with coronary heart disease. The researchers observed that dentists, who are habitually exposed to mercury, had toenail mercury levels (0.91 mcg/gram) that were twice as high as the levels found in non-dentists (0.45 mcg/gram). They also found a direct relationship between fish consumption and mercury level with participants consuming an average of 357 grams (3/4 lb) of fish per week having a level of 0.75 mcg/gram while those who consuming 145 grams (1/3 lb) per week had a level of 0.29 mcg/gram. After adjusting for age, smoking and other risk factors for heart disease the researchers conclude that there is no clear association between total mercury exposure and the risk of coronary heart disease, but that a weak relation cannot be ruled out.

*Guallar, E, et al. Mercury, fish oils, and the risk of myocardial infarction. New England Journal of Medicine, Vol. 347, November 28, 2002, pp. 1747-54*

*Yoshizawa, K, et al. Mercury and the risk of coronary heart disease in men. New England Journal of Medicine, Vol. 347, November 28, 2002, pp. 1755-60*

*Bolger, PM and Schwetz, BA. Mercury and health. New England Journal of Medicine, Vol. 347, November 28, 2002, pp. 1735-36*

**Editor's comment:** The two studies clearly do not agree as to whether high mercury levels are associated with an increased risk of coronary heart disease. I am inclined to believe that they are. Furthermore, there is compelling evidence of significant associations between high mercury levels and Alzheimer's disease, Parkinson's disease, congestive heart failure, kidney damage, hearing loss, and high blood pressure. So definitely, mercury, from whatever source, is a very bad actor and should be avoided. The joint European/Israeli/US study clearly confirms that DHA (fish oil) is protective against a first heart attack, so regular consumption of low-mercury-level fish is still a healthy option. An alternative approach to obtaining DHA (and EPA) on a regular basis is to supplement with 1 gram/day of a high quality, molecular distilled, non-rancid fish oil containing a minimum of 220 mg EPA and 220 mg DHA. Reliable sources of such fish oils can be found at [www.consumerlab.com/results/omega3.asp](http://www.consumerlab.com/results/omega3.asp) and at <http://www.coromega.com/>

To be on the safe side it is best to eat fish and shellfish with an average mercury content of less than 0.10 ppm. Unfortunately, there are not too many species left that fulfill this requirement. King crab, scallops, catfish, salmon (fresh, frozen and canned), oysters, shrimp, clams, saltwater perch, flounder, and sole are all good choices. Salmon is my favourite because of its combination of a low mercury content with a high level of beneficial EPA and DHA. The following fish species should be avoided: tilefish, swordfish, king mackerel, shark, grouper, tuna, American lobster, halibut, pollock, sablefish, and Dungeness and blue crab. Limited sampling of the following also indicated high mercury levels: red snapper, marlin, orange roughy, saltwater bass. Atlantic cod, haddock, mahi mahi, and ocean perch have mercury levels around 0.18 ppm, so should be eaten in moderation. For more on mercury

content of fish see [www.cfsan.fda.gov/~frf/sea-mehg.html](http://www.cfsan.fda.gov/~frf/sea-mehg.html)

### **Amalgam dental fillings are a health hazard**

NEW YORK, NY. Dr. Gary Null, PhD and Dr. Martin Feldman, MD have just released a major report concerning the health hazards of dental amalgam (silver) fillings. They point to incontrovertible evidence that mercury continually leaches from amalgam fillings at a rate of about 10-50 times the safe limit (0.28 microgram/day) set by the US Public Health Service. Mercury has been linked to birth defects, multiple sclerosis, fatigue, Alzheimer's disease, depression, anxiety, reduced immune function, antibiotic resistance, and impaired kidney function. Researchers have found that mercury is a potent killer of white blood cells and that proper removal of amalgam fillings will restore white blood cell counts to healthy levels. There is also evidence that the number of T-cells (an important part of immune defenses) decreases substantially when amalgam fillings are placed in the mouth, but increases again once the fillings are removed.

The American Dental Association (ADA) maintains that amalgam fillings are safe – a position made completely untenable by the fact that the Environmental Protection Agency (EPA) has declared amalgam to be a hazardous material. It is interesting that the ADA, when confronted by a lawsuit regarding the use of amalgam fillings, made the following statement in its defense, "The ADA owes no legal duty of care to protect the public from allegedly dangerous products used by dentists."

Several studies have found that chewing markedly increases the amount of mercury released from amalgam fillings into the mouth and that these mercury vapours easily find their way into the pituitary gland and the brain. Autopsies performed at the Karolinska Institute in Sweden revealed that people with amalgam fillings had three times more mercury in the brain and nine times more in the kidneys than did people with no amalgam fillings.

Common bacteria found in the mouth and intestines can convert mercury to methylmercury, a compound that is 100 times more toxic than is elemental mercury. Methylmercury passes both the blood-brain and placental barriers and following a large exposure can remain in the brain for 10 years or more. Considering that dentists still place about one million amalgam fillings in the mouths of American citizens every day it is clear that disorders caused by amalgam toxicity is a horrendous problem. Not everyone is sensitive to mercury, but various studies estimate the percentage that are to be somewhere between 10 and 44 per cent. Fortunately, a few governments are beginning to wake up to the dangers and are passing laws restricting or outright banning the use of amalgam fillings. The German, Norwegian, Swedish, Canadian and British governments have advised dentists not to install or remove amalgam fillings in pregnant women. Since November 2000 the following sign has been posted in all dental offices in California, "WARNING – Amalgam fillings contain a chemical element known to the State of California to cause birth defects or other reproductive harm". The California Dental Association apparently lobbied successfully to ensure that the word mercury did not appear in the warning. The Australian Society of Oral Medicine and Toxicology has concluded that mercury in amalgam fillings is continuously released from the fillings and accumulates in tissues throughout the body where it interferes with many physiological functions.

*Null, Gary and Feldman, Martin. Mercury dental amalgams: the controversy continues. Journal of Orthomolecular Medicine, Vol. 17, No. 2, 2nd Quarter 2002, pp. 85-110 [180 references]*

**Editor's comment:** There is no question in my mind that amalgam fillings pose a serious health risk to everyone whether or not they actually exhibit symptoms of mercury toxicity at this time. New amalgam fillings should be avoided and old ones replaced with composite fillings under safe conditions when it becomes necessary.

### **Mercury linked to heart disease**

ROME, ITALY. Medical researchers at the Catholic University in Rome report that patients with congestive heart failure (idiopathic dilated cardiomyopathy or IDCM) have vastly elevated concentrations of mercury and antimony in their heart tissue. They compared trace element concentrations in biopsy samples from the left ventricle among patients with IDCM and

patients with valvular disorders or no heart disease at all. The IDCM patients had mercury concentrations 22,000 times higher than in the controls. Antimony concentrations were 12,000 times higher and silver, gold, chromium and arsenic levels were also highly elevated. Holter monitoring revealed frequent ectopic (premature) beats in all the IDCM patients and ventricular tachycardias in six of the 13 patients. None of the patients had had occupational exposure to the trace elements. Researchers at the University of Calgary point out that dental amalgams would be the most likely source of the mercury.

*Frustaci, Andrea, et al. Marked elevation of myocardial trace elements in idiopathic dilated cardiomyopathy compared with secondary cardiac dysfunction. Journal of the American College of Cardiology, Vol. 33, May 1999, pp. 1578-83 [32 references]*

*Lorscheider, Fritz and Vimy, Murray. Mercury and idiopathic dilated cardiomyopathy. Journal of the American College of Cardiology, Vol. 35, March 1, 2000, p. 819 (letter to the editor)*

### **Trigeminal neuralgia linked to amalgam fillings**

JACKSONVILLE, FLORIDA. Dr. William Cheshire, a physician at the Mayo Clinic, reports on a case where a woman's trigeminal neuralgia (tic douloureux) was traced to a galvanic reaction between an amalgam filling and an adjacent gold-alloy crown. Consumption of tomatoes and other acidic foods produced intense jolts described as being like those of an "electrical battery". The jolts in turn resulted in excruciating pain in the trigeminal nerve. Replacing the amalgam filling with a composite resolved the problem. Dr. Cheshire points out that dissimilar metals in contact with saliva can form a galvanic cell which can generate electrical currents with several hundred millivolts of potential. He points out that many patients with trigeminal neuralgia describe their pain in terms of "electrical" jolts and concludes that his patient's neuralgia may well have been triggered by the galvanic reaction between the amalgam filling and the gold crown.

*Cheshire, William P., Jr. The shocking tooth about trigeminal neuralgia. New England Journal of Medicine, Vol. 342, June 29, 2000, p. 2003 (correspondence)*

### **Dental alloys affect cellular energy production**

*NOTE: We usually do not report test tube or animal experiments, but thought we would make an exception in this case. The findings that commonly used dental alloys may interrupt the normal function of human cells is a first and could have wide-ranging effects.*

BIRMINGHAM, ALABAMA. Although nickel is known to be carcinogenic in humans it is still widely used in certain dental alloys. Researchers at the University of Alabama now report that other components of dental alloys (beryllium, chromium, and molybdenum) as well as nickel affect the very basic function of human cells - the production of energy (ATP). ATP is produced in the mitochondria of cells and involves highly oxidative processes. It is becoming increasingly clear that abnormalities in the mitochondrial processes are important causes of human disease. Some researchers believe that a slowing down of these processes actually heralds the very first stage in the proliferation of abnormal cells and cancer.

The Alabama researchers exposed cultures of human gingival (gum) cells to solutions of nickel, beryllium, chromium (tri- and hexavalent) and molybdenum (hexavalent) for periods of 24 and 72 hours. They then measured the energy production and oxygen consumption of the cells' mitochondria in the various solutions. Cells in contact with nickel or hexavalent chromium were most affected and showed decreased ATP (energy) production as well as a decrease in oxygen consumption. The effects of beryllium, molybdenum, and trivalent chromium were similar, but less pronounced. The researchers conclude that their findings may be the first indication that some components of common dental alloys may be detrimental to human health. They urge further research to establish possible synergisms between mixtures of these different metals on mitochondrial energy production. [54 references]

*Messer, R.L.W., et al. An investigation of fibroblast mitochondria enzyme activity and respiration in response to metallic ions released from dental alloys. J Biomed Mater Res, Vol.*

### **Dental amalgams come under fire - again!**

TAURANGA, NEW ZEALAND. The New Zealand Ministry of Health is reviewing its policy on the use of mercury-containing amalgams for tooth fillings. This review comes hard on the heels of a precautionary advice from the UK Department of Health which warns pregnant women not to have amalgam fillings installed. Dr. Mike Godfrey, a leading environmental physician, points out that several major amalgam manufacturers have issued Material Safety Data Sheets and Directions for Use which clearly warns of the many dangers of amalgam fillings. Among the restrictions - amalgam fillings should not be used next to fillings or crowns containing other metals, they should not be used under crowns, they should not be used in patients with kidney disease, in pregnant women or in children aged six years or younger. The manufacturers also warn that mercury vapours from amalgam fillings can induce psychiatric symptoms in extremely low concentrations. Depression, mental deterioration, and irritability are among the symptoms listed. Amalgam fillings are banned in Sweden and Health Canada has proposed a limit of one (two surfaces) amalgam fillings in a child and four (eight surfaces) in an adult. Dr. Godfrey points out that his chronic fatigue syndrome patients have an average of 15 amalgam fillings each and exhibit many of the symptoms that the amalgam manufacturers are warning against.

*Godfrey, M.E. and Feek, Colin. Dental amalgam. New Zealand Medical Journal, Vol. 111, August 28, 1998, p. 326 (letters to the editor)*

### **Depression and amalgam fillings**

FORT COLLINS, COLORADO. There is some evidence that people with dental amalgam fillings are more likely to suffer from depression than are people without such fillings. Now researchers at the Rocky Mountain Research Institute report that removal of amalgam fillings can markedly improve the symptoms of manic-depressive illness (bipolar disorder). Their study involved 20 patients who had been diagnosed with manic-depressive illness. All the patients had amalgam fillings (an average of 10 fillings each). The concentration of mercury in the mouth was measured at the start of the study and was found to increase almost 300 per cent after chewing gum for 10 minutes. Other research has shown that 75 per cent or more of the mercury vapor released by chewing is inhaled into the lungs where it enters the blood stream and subsequently passes into the brain. Eleven of the patients were assigned to have all their mercury fillings removed and were also given multi-vitamins and antioxidants to help chelate and remove the mercury released during the dental work. The remaining nine patients had a sealant placed over their fillings and were told that this sealant would prevent mercury from being released from their fillings. In actual fact there was no evidence that it would do so. The control group patients were given a supplemental vitamin and mineral tablet. The patients all completed various questionnaires designed to evaluate their mental health before and six to eight months after treatment. It was very clear that the patients who had had their amalgam fillings removed had improved very significantly in such important parameters as anxiety, depression, paranoia, hostility, and obsessive compulsive behaviour. Some of the patients were able to discontinue their lithium medication after amalgam removal. The researchers caution that their study was relatively small and urge large scale clinical trials to validate their findings.

*Siblerud, Robert L., et al. Psychometric evidence that dental amalgam mercury may be an etiological factor in manic depression. Journal of Orthomolecular Medicine, Vol. 13, No. 1, First Quarter 1998, pp. 31- 40*

### **Amalgam fillings may damage kidneys.**

NEWSBRIEF. Amalgam fillings and skin-lightening creams both contain significant amounts of mercury. Researchers at the King Faisal Hospital in Riyadh, Saudi Arabia have just completed a study aimed at determining whether the mercury actually gets into the blood stream. The study involved 225 women (aged 17 to 58 years) who had their urine measured for mercury,

creatinine, urea, uric acid, phosphorus, magnesium, calcium, and glucose. The urinary mercury level varied between 0 and 204.8 micrograms per liter and was directly related to the number of dental amalgam fillings present in the women's mouths. The researchers conclude that chronic exposure to mercury may be associated with deterioration of renal (kidney) function.

*Biometals, Vol. 10, October 1997, pp. 315-23*

### **Amalgam fillings and hearing loss**

FORT COLLINS, COLORADO. The leaching of toxic mercury from amalgam fillings has been implicated in hearing loss. Mercury toxicity has also been linked to multiple sclerosis (MS). It is believed that the toxic effects of mercury cause damage to the blood brain barrier, demyelination (damage to the nerves' myelin sheaths) and slowing of the nerve conduction velocity. Now researchers at the Rocky Mountain Research Institute provide convincing proof that dental amalgam fillings may be responsible for the hearing loss often experienced by multiple sclerosis patients. Their experiment involved seven women aged 32-46 years who had been diagnosed with MS. The women underwent a standard hearing test in a sound booth and then had all their amalgam fillings replaced with composites. Six to eight months later they were again given the hearing test. Six of the seven patients had significantly improved hearing in the right ear and five of the seven showed improvement in the left ear. Overall, hearing improved an average of eight decibels. The researchers conclude that amalgam fillings may be a significant factor in hearing loss experienced by MS patients and could be a factor in hearing loss in other people as well.

*Siblerud, Robert L. and Kienholz, Eldon. Evidence that mercury from dental amalgam may cause hearing loss in multiple sclerosis patients. Journal of Orthomolecular Medicine, Vol. 12, No. 4, Fourth Quarter, 1997, pp. 240-44*

### **Chronic mercury poisoning is widespread**

HILLEROED, DENMARK. A Danish dentist, Dr. H. Lichtenberg, reports that most of his patients with amalgam fillings suffer from chronic mercury poisoning. Dr. Lichtenberg measured the actual concentration of mercury vapour in the mouths of his patients and found that it varied between 3 micrograms of mercury vapour per cubic meter of air and 329 mcg/m<sup>3</sup> with an average of 54.6 mcg/m<sup>3</sup>. This compares to a maximum permitted level in the workplace of 50 mcg/m<sup>3</sup> for people working eight hours a day five days a week. NOTE: This level applies to Denmark; the maximum level permitted in Switzerland is 10 mcg/m<sup>3</sup> and in the USA it is 100 mcg/m<sup>3</sup>. A recent conference in Canada proposed a Tolerable Daily Intake (TDI) for mercury vapour of 0.014 mcg/kg of body weight per day; this corresponds to a maximum tolerable daily intake of 1.0 mcg for a person weighing 70 kilograms. Most of Dr. Lichtenberg's patients were thus exposed to 50 times the TDI. More than half of Dr. Lichtenberg's patients exhibited one or more of the following symptoms of chronic mercury poisoning - fatigue, poor concentration, poor memory, bloating, joint pain, muscle fatigue, cold hands and feet, irritability, and headache. Mercury poisoning from dental fillings has also been implicated in Alzheimer's disease and heart disease.

*Lichtenberg, H. Mercury vapour in the oral cavity in relation to number of amalgam surfaces and the classic symptoms of chronic mercury poisoning. Journal of Orthomolecular Medicine, Vol. 11, No. 2, Second Quarter 1996, pp. 87-94*

### **Mercury linked to heart disease**

HELSINKI, FINLAND. Researchers at the University of Kuopio in Finland have just completed a major study which clearly implicates mercury as a major cause of heart attacks and other coronary and cardiovascular diseases. The researchers set out to discover why men in Eastern Finland who eat lots of locally caught fish have an exceptionally high mortality from cardiovascular disease. Their conclusion was that the non-fatty freshwater fish eaten in Eastern Finland contains large amounts of mercury. The researchers discovered that men who had a high fish consumption not only had a high mercury content in their hair and urine, but

also had a two-fold higher risk of having a heart attack and a three-fold higher risk of dying from heart disease than did men with a lower content of mercury in their hair. Men who ate fatty, ocean-caught fish such as salmon, herring, and tuna did not have an increased level of mercury in their hair. The researchers believe that mercury promotes heart disease in several ways: mercury promotes free radical generation; it inactivates the body's natural antioxidant glutathione; and it binds with selenium thus making it unavailable as an antioxidant and component of glutathione peroxidase. All these mechanisms would lead to an increased level of lipid peroxidation and subsequent heart disease. The researchers also point out that earlier studies have discovered a clear correlation between the number of amalgam tooth fillings and the risk of heart attack. Selenium and vitamin E have both been found to have a protective effect against mercury toxicity.

*Salonen, Jukka T. et al. Intake of mercury from fish, lipid peroxidation, and the risk of myocardial infarction and coronary, cardiovascular, and any death in Eastern Finnish men. Circulation, Vol. 91, No. 3, February 1, 1995, pp. 645-55*

### **Peer of the Realm questions use of amalgam fillings**

LONDON, ENGLAND. Lord Baldwin, joint chairman of the British Parliamentary Group for Alternative and Complementary Medicine, is questioning the safety of amalgam dental fillings. In a letter published in the British Medical Journal Lord Baldwin asserts that it is up to the dental profession to prove that amalgam fillings are safe and, in Lord Baldwin's opinion, this they have not done. To point to the fact that amalgam fillings have been used for a hundred years is not a proof of safety anymore than it is to claim that tobacco smoking must be safe because people have been doing it for a long time, says Lord Baldwin.

*Baldwin, E.A.A. Controlled trials of dental amalgam are needed. British Medical Journal, Vol. 309, October 29, 1994, p. 1161*