

# Lead Exposure & Oral Chelation— 'How Low is Low Enough?'

*Recent studies published in The New England Journal of Medicine make clear there is no longer a so-called "safe" level of exposure to lead. The health implications for adults and children alike are critically important.*

During the past three decades, epidemiologic studies have demonstrated associations between blood lead concentrations and reduced children's IQs at successively lower and lower concentrations. In response, the Centers for Disease Control and Prevention (CDC) repeatedly lowered its definition of an elevated blood lead concen-



tration, which now stands at 10 µg per deciliter.

In the April 17, 2003 issue of *NEJM*, however, researchers extend the unfortunately familiar relation between increased blood lead concentrations and decreased IQ to blood lead concentrations below 10 µg per deciliter.

In their study, of 172 children in whom blood lead concentrations were measured serially

between the ages of six months and five years, 101 did not have a recorded blood lead concentration above 10 µg per deciliter. Yet, strong and significant associations between blood lead concentration and IQ were observed in these children at both three and five years of age, including a decline in IQ of more than seven points over the first 10 µg per deciliter of lifetime average blood lead concentration and a further



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## Nattokinase—This is Big News for Heart & Circulatory Health

**Nattokinase.** You have to remember this name. This enzyme, derived from the traditional Japanese food natto, is the most important single new nutrient to emerge recently for heart and circulatory health.

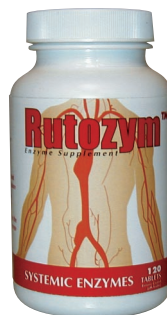
The companies that offer nattokinase will not tell you what it does, because they would be making various kinds of claims that federal regulations won't allow. So it's up to us to keep up the drumbeat and tell you about this amazing nutritional supplement.

The biggest health concern in America today is abnormal blood clotting. Some doctors call the blood clot the single most lethal event in the western world because with clotting comes heart attacks and stroke.

Doctors use enzymes such as urokinase to break up such clots. But nattokinase also performs this same task, lysing clots, breaking them up. Yet, it is natural, nontoxic and safe to use daily as a preventive.

We don't know how many adverse cardiac consequences nattokinase has prevented in Japan where it is consumed as part of the traditional food natto. We suspect that number is substantial.

**KEY HEALTH TIP**—Several brands of nattokinase are available. But one company that understands how to properly complex nattoki-



nase and is providing the actual clinical materials studied is Naturally Vitamins and its **Rutozym™** formula. Any nattokinase formula is good. But **Rutozym** with **rutin, bromelain** and **papain**, each of which is known to also break up clots, gives you your best nattokinase-based complex.

A prophylactic dosage is eight tablets; the maintenance dosage is four tablets. If you are using medications or have existing heart disease, please work with your health professional. We are preparing a special report on patients who've been able to reduce dosages of blood thinners by substituting nattokinase. So stay tuned and, to find out more about nattokinase, log on to [www.freedompressonline.com](http://www.freedompressonline.com) and read some of our past articles or pick up past issues of **Healthy Living** from your local health food store.

**ON THE COVER**—California Poppy (*Eschscholzia Californica*), an ingredient in "True You" flower remedy from Pure Planet

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decline of approximately two points associated with an increase from 10 to 20 µg per deciliter.

Relatively small changes in the mean IQ of a large number of children will dramatically increase the proportion of children below any fixed level of concern, such as a deficient IQ of below 80, and decrease the proportion above any "gifted" level, such as 120.

In other words, the implications for society, as well as individuals, are

*...lead exposure is associated with increased risk for kidney disease, high blood pressure, heart disease and cancer—and, especially for women, during menopause lead concentrations are likely to increase if there is significant bone loss.*

quite devastating. We need smart, healthy children and adults. But when our bodies are infiltrated by this age-old contaminant, not only does intellectual prowess decline but also criminal and violent behavior increases. Lead exposure shares many risk factors with delinquent behavior, and bone lead levels are related to delinquent acts, note researchers.

### What to Do...

Preventing lead exposure must be ongoing. Oral chelation therapy is easily the best way to continually detoxify

the body from new outside lead exposures and from endogenous lead exposures as the heavy metal is continuously released from the bones where it is stored, causing re-exposure.

Oral chelation with the amino acid **ethylenediaminetetraacetic acid (EDTA)** helps to trap and remove lead. "Penicillamine, DMPS, DMSA, are all orally effective chelators, but most chelating physicians are not aware that oral EDTA also is sufficiently absorbed to be effective,

and has received [Food and Drug Administration] approval for treating asymptomatic elevations of body burden of lead," notes Ron Kennedy, M.D., of Santa Rosa, California.

The use of EDTA in the treatment of lead poisoning received wide attention during the 1950s, especially as scientists began to document the many devastating consequences of lead poisoning and the ongoing need for prevention of absorption. Most

scientists agree it is far more prudent to prevent exposure in the first place than to try to reduce levels later.

No new method of prevention and detoxification has shown so much promise as the use of oral EDTA. The principle of its action is quite simple. The edathamil portion combines with the lead ions in the body to form non-ionized lead edathamil, a substance which, though it contains lead, shows practically none of the chemical properties of lead and therefore may be considered, for practical purposes, to be a nontoxic form of this metal. Moreover, the lead edathamil is very readily excreted in the urine and feces. ❖

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### Prescription for Detoxification

We recommend a quality EDTA formula such as **Cardio-Chelate™** from Metabolic Response Modifiers (also known as MRM), which was created to meet the needs of those interested in the "alternative" approach to heart and circulatory health.

Besides EDTA, the formula also supplies **methylsulfonylmethane (MSM)**, **N-acetyl-cysteine**, and **vitamin C**. These nutrients support the liver during the detoxification process, especially N-acetyl cysteine, which helps to produce glutathione, one of the body's most powerful detoxification compounds. Vitamin C will help to prevent free-radical-related damage to tissues.

Since EDTA can also chelate some essential minerals, be sure to supplement with a quality multiple vitamin and mineral formula. We recommend a formula such as **Beyond Basics**, also from MRM.

**Dosage**—Take two capsules, one to two times daily, with meals.

**Availability**—**Cardio-Chelate** is available nationwide at natural health centers and from health professionals. To find a natural health center in your community carrying them, contact MRM toll-free at (800) 948-6296.



### FYI: Who Needs to Detox with EDTA?

**If you live near a busily trafficked street, freeway or highway, you should be using methods to prevent lead accumulation. If you work in industries where there might be lead exposure, such as painting, automotive, plating or a machine shop, you should be using methods to prevent lead accumulation. If you are contemplating pregnancy, you should go through a period of detoxification prior to conception (both men and women). If you have a teenager with behavioral problems, he or she might benefit from detoxification. Adults with high blood pressure, osteoporosis or heart disease should consider a period of detoxification. However, persons with renal disease or on any type of medication should first consult with their physician.**