

LEAD IN CHOCOLATE: THE IMPACT ON CHILDREN'S HEALTH
American Environmental Safety Institute
Fact Sheet – May 2002

On May 8, 2002, the American Environmental Safety Institute will petition the Director of the California Department of Health Services to

- adopt regulations under the California Childhood Lead Poisoning Prevention Act to list any chocolate products containing more than 0.02 parts-per-million of lead as “environmental lead contamination,” and require the chocolate manufacturers who sell in California to pay the Act’s required fees to help fund the public education effort to fight lead poisoning; and
- find that any chocolate product containing more than 0.02 parts-per-million of lead is “adulterated” within the meaning of California Health & Safety Code § 110545, California’s Food and Drug statute.

In concert with filing suit on the same day against the major chocolate companies under the consumer health protection provisions of California’s Proposition 65, the Institute will take these administrative petition actions based on the results of its recent research into the health effects of a wide variety of chocolate products in California. A well-respected analytical laboratory performed the Institute’s testing, and found that significant amounts of the toxic metals lead and cadmium are present in virtually every chocolate product tested. The following facts demonstrate the extent of this lead in chocolate problem and its significant impact on children:

1. Significant levels of lead were found in a wide array of chocolate products (including syrup/toppings, milk chocolate products, dark chocolate products, and chocolate products that contain nuts, rice and other “inclusions”), with the levels ranging as high as 0.105 parts-per-million (“ppm”), 67 times as high as the lowest amount of 0.00157 ppm. These results show that the amount of lead in chocolate products varies dramatically. Clearly certain manufacturers have found ways to reduce the amount of dangerous lead in chocolate – why can’t the rest?
2. Americans eat an average of 12 pounds of chocolate per year. Chocolate is marketed intensely to children under the age of 12, those most susceptible to the dangers of lead and cadmium exposure, with chocolate candy sales growing more than 7% per year in the late 1990’s. Chocolate candy sales grew the most for afternoon favorites such as fun size and snack size bags of chocolate candies, which grew at a 12% per annum rate, according to the Chocolate Manufacturers’ Association.
3. The Institute’s research shows that daily lead exposure from many chocolate products violates the Proposition 65 “no significant risk” limit for lead of 0.5 micrograms per day.¹

¹ California Health & Safety Code § 25249.6 and 22 California Code of Regulations §12805(a).

4. The U.S. Centers for Disease Control considers lead poisoning the major environmental health threat to children in the United States, stating in 1991 that:

Lead is ubiquitous in the human environment as a result of industrialization. It has no known physiologic value. Children are particularly susceptible to lead's toxic effects. Lead poisoning, for the most part, is silent: most poisoned children have no symptoms. The vast majority of cases, therefore, go undiagnosed and untreated.²

5. The impact of daily chocolate consumption on children is to increase dramatically, often by 100% or more, the amount of lead in the child's diet. For example, a 5 year-old child consuming as little as the 1.44 micrograms in a typical snack pack of M&Ms consumes more lead than he or she would get in the entire daily diet of the average 5 year-old child in America today – this exposure also violates Proposition 65's "no significant risk" limit for daily exposure to lead.
6. The increased lead in a child's diet from eating candy increases the lead in the child's blood system, which in turn adversely affects their neurological development, meaning lower IQ scores and the like. In 1999, the Centers for Disease Control reported that the average blood lead level for children ages 1 to 5 in America was 2.0 micrograms per deciliter ("ug/dl") of blood; for children ages 6-11, the number was 1.3 ug/dl.³ The U.S. Environmental Protection Agency has determined that for every microgram of lead that a child consumes, their blood lead level is increased by 0.16 ug/dl,⁴ and that a sustained 1 µg/dL increase in blood-lead concentration results in a loss of 0.257 IQ points in an average child.
7. Based on the blood lead level data developed by the Centers for Disease Control and the U.S. Environmental Protection Agency, the consumption of just one of these typical M&M chocolate snacks results in an 18% increase in an average 6 year old child's blood lead level.
8. The consumption of a typical Kraft Chocolate Fudge Pudding (2.7 micrograms of lead) results in a 33% increase in an average 6 year old child's blood lead level.
9. The consumption of a typical Nestlé's Double Chocolate Meltdown Cocoa Drink (3.67 micrograms of lead) results in a 45% increase in an average 6 year old child's blood lead level.

² *Preventing Lead Poisoning in Young Children*, U.S. Dept. of Health and Human Services, Centers for Disease Control (1991)(Introduction).

³ <http://www.cdc.gov/nceh/dls/report/results/Lead.htm>

⁴ U.S. Environmental Protection Agency, *Air Quality Criteria for Lead*, (EPA-600/8-83/028aF, Research Triangle Park, North Carolina)

10. The consumption of a Rocky Mountain Chocolate Easter Bunny (4.93 micrograms) results in a 61% increase in an average 6-year-old child's blood lead level.

The Institute – and, more importantly, California's consumers and its young people – needs your help. Please contact the Director of the California Department of Health Services and indicate your support for the Institute's petition to call on the chocolate industry to get the lead out of chocolate. You can reach the Director as follows:

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Director
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Our basic slogan says it all: "They Can, So They Should – Get the Lead Out!"