

Childhood lead linked to adult obesity

Many studies have linked low exposures to lead with reduced stature in children. One investigation even found hints of a possible mechanism for this: the heavy metal's inhibition of an individual's secretion of growth hormone (SN: 8/29/92, p.143). Now, a group of researchers has examined the fallout of these youthful exposures to lead. To his surprise, says study leader Rokho Kim of the Harvard School of Public Health in Boston, he found that in 20-year-olds early lead exposures were more strongly linked to weight than to height.

The team studied 79 young adults whose tooth reservoirs of lead- a measure of youthful exposure - had been assayed at about age 7. In the new study, Kim's group reassessed lead stores in the body, this time using an X-ray fluorescence technique (SN: 2/18/89, p.111) on the shin and kneecap.

Overall, the researchers found, adults who had taken in the most lead as children also gained the most weight (relative to their height) between the ages of 7 and 20. Indeed, Kim notes, some of the subjects with highest exposures were obese.

"If our finding is replicable and robust, the ramifications are significant," his team argues in the October **ENVIRONMENTAL HEALTH PERSPECTIVES**. Both excess weight and high concentrations of lead in the body (SN: 9/3/88 p.158) have been associated with high blood pressure in adults. This suggest, Kim says, that lead's link to high blood pressure - a major risk factor for heart disease -may actually reflect its apparent role in weight gain.

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Expanding the boundaries of current thinking about nutrition and health

TRACE MINERALS IMPORTANT FACETS OF LIFE

Minerals and trace minerals are both essential to human health, and maintaining adequate levels and balance in every tissue, fluid, cell and organ in the body may be the key considerations. If the body requires more than 100 milligrams (i.e., more than 1/50th of a teaspoon of a mineral each day, the substance is labeled a mineral. If the body requires less than this, it is labeled a trace mineral.

However, each individual absorbs and uses minerals and trace minerals in a unique ratio that is affected by age, stomach acid output balanced bowel flora, lack of intestinal illness and parasites, and dietary fiber intake.

Utilization of the minerals by the body is jeopardized by the presence of toxic elements such lead, cadmium, mercury and aluminum. Cadmium, for example, can cause hypertension, cancer and immune disorders. Fortunately, elements in the diet can also protect against toxic elements. Zinc, calcium and vitamin C protect against cadmium.

Illness causes an increased need for minerals and trace minerals, and the body's demand for some of these such as zinc increases under psychological stress. Also, drug-nutrient interactions are often deleterious to health. For example, antacids can hinder absorption of iron in the gut and can also cause hyperexcretion of magnesium and zinc.

CHLORINE LINKED TO HEART DISEASE & CANCER IN DOCTORS REPORTS

“Chlorine is the greatestcrippler and killer of modern times. While it prevented epidemics of one disease, it wes creating another. Two decades ago, after the start of chlorinating our drinking water in 1904. The present epidemic of heart trouble, cancer and senility began.”

SAGINAW HOSPITAL
Dr. J.M. Price, MD.

“Cancer,risk among people drinking chlorinated water is 93% higher than among those whose Water does not contain chlorine.”

U.S. COUNCIL OF ENVIROMENTAL QUALITY

“Drinking tap water that is chlorinated is hazardous, if not deadly to your health.”

HEALTHY WATER FOR A LONGER LIFE
Dr. Martin Fox

“Known carcinogens are found in drinking water as a direct consequence of the practice of chlorination. A long established public health practice for the disinfection of drinking water.”

MUNICIPAL ENVIROMENTAL RESEARCH LABRATORY
Francis T. Mayo. Director

“Chlorine is used almost universally in the treatment of public drinking water because of its toxic effect on harmful bacteria and other waterborne, disease-causing organisms. But there is a growing body of scientific evidence that shows that chlorine in drinking water may actually pose greater long term dangers than those for which it was used to eliminate. These effects of chlorine may result from either ingestion or absorption through the skin. Scientific studies have linked chlorine and chlorination by-products to cancer of the bladder, liver, stomach, rectum, and colon, as well as heart disease, atherosclerosis (hardening of the arteries), anemia, high blood pressure, and allergic reactions. There is also evidence that shows that chlorine can destroy protein in our body and cause adverse effects on skin and hair. The presence of chlorine in water may also contribute to the formation of chloramines in the water, which can cause taste and odor problems.”

“Since chlorine is required by public health regulations to be present in all public drinking water supplies, it is up to the individual to remove it at the point-of-use in the home. The best available method of chlorine removal, for the individual consumer is found in the Shower Master Shower Filter Unit.”

“The Shower Master Shower Filter Unit is of great value to those who are concerned about the adverse health effects of exposure to chlorine due to absorption through the skin or by inhalation. The Shower Master Shower Filter will provide superior protection from chlorine, when used in accordance with the Manufacturer’s recommended operating procedures.

KEMYSTS LABORATORY
Dr. Riddle, Ph.D.

“Chlorine gas was despicably used during WWI. When the war was over, the use of chlorine was diverted to poisoning germs in our drinking water. All water supplies throughout the country were chlorinated. The combination of chlorine (when in drinking water) and animal fats results in atherosclerosis, heart attacks, and death.”

WATER CAN UDERMINE YOUR HEALTH
Dr. N.W. Walker, D.S.

09438682 95368682

Studies of aluminum neurobehavioral toxicity in the intact mammal.

Yokel RA; Allen DD; Meyer JJ

Division of Pharmacology & Experimental Therapeutics, College of Pharmacy, University of Kentucky, Lexington 40536-0082, USA.

Cell Mol Neurobiol (UNITED STATES) Dec. 1994, 14 (6)
p791-808, ISSN
0272-4340 Journal Code: CPX

ES, NIEHS; +

Languages: ENGLISH

Document type: JOURNAL ARTICLE

1. Aluminum (Al) has been implicated in neurotoxic syndromes in several conditions, including Alzheimer's disease (AD). The developmental stage of the mammalian brain most susceptible to Al was determined in rabbits systematically exposed to Al during the prenatal, postnatal, or second month or for 1 month as adults or as aged subjects. Eyeblink reflex

09476469 95406469

[A new inducible transferrin-independent iron uptake system involved with aluminum accumulation in the brain of patients with Alzheimer's disease]

Oshiro S

Department of Biochemical Genetics, Tokyo Medical and Dental University, Japan.

Tanpakushitsu Kakusan Koso (JAPAN) Aug. 1995, 40 (11) p1738-43, ISSN
0039-9450 Journal Code: Q7D

Languages: JAPANESE

Document type: JOURNAL ARTICLE REVIEW; REVIEW, TUTORIAL

09472118 95402118

Aluminum impairs hippocampal long-term potentiation in rats in vitro and in vivo.

Platt B; Carpenter DO; Busselberg D; Reymann KG; Riedel G

New York State Department of Health, Wadsworth Center for Laboratories and Research, Albany 12201, USA.

Exp Neurol (UNITED STATES) Jul. 1995, 134 (1) p73-86, ISSN
0014-4886 Journal Code: EQF

0945 1246 95381246

Toxicological investigations in the semiconductor industry:
III: Studies on prenatal toxicity caused by waste products from aluminum plasma etching processes.

Schmidt R; Scheufler H; Bauer S; Wolff L; Pelzing M; Herzsuh R

Institute of Human Genetics and Medical Biology Martin Luther University, Halle, Germany.

Toxicol Ind Health (UNITED STATES) Jan-Feb 1995, 11 (1) p49-61, ISSN
0748-2337 Journal Code: VWS