Late in 1986 the U.S. Environmental Protection Agency (EPA) reported that at least 40 million Americans drink water containing more lead than the EPA's recommended exposure. Excess levels of lead can cause severe learning disabilities in children, blood pressure and neurological ailments in adults and complications in pregnancy. High concentrations of lead in the body can be fatal.

Most of the lead in drinking water comes from pipes joined using lead solder in copper plumbing. Less often, lead comes from old lead pipes connecting water mains with homes, and increasingly rarely, from lead pipes in old public water systems. In 1985 the EPA banned the use of lead in new public and private water systems and in plumbing repairs. Many homes--most homes--still contain plumbing with lead. To check for lead, look at your house's pipe joints. Joints made of lead are a dull gray while joints that are silver are made of other materials.

According to the EPA, homeowners who think they may have a lead problem can take steps to protect themselves and their families, including letting the tap run for at least two to three full minutes before using the water for cooking or drinking, to flush out lead that may have accumulated while the line was in use and to avoid using hot water (which dissolves more lead from pipes and solder) for cooking or mixing baby formula. Water can be tested by local water supply systems or by private laboratories.

The WaterTest Corporation of New London, New Hampshire [phone: (603) 526-6756] offers a mail order test for $31.95. The president of WaterTest says remedial actions can be taken to remove or reduce the amount of lead in water, including replacing lead solder with silver, using special chemical filters to remove lead, and buying tanks that remove corrosive materials from water (thus reducing the water's ability to dissolve lead from pipes and pipe joints). The EPA says another possibility is to use bottled water for drinking; however, the agency says, unlike public water supplies, bottled water does not have to meet federal standards.

EPA officials said that people who find high levels of lead in their water might want to have blood tests to determine how much has entered their systems.

---Peter Montague

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**NEW INDUSTRY IN NJ TO STERILIZE HUMAN FOOD USING RADIOACTIVITY**

With relaxed federal restraints on the process of irradiation, plants in New Jersey are gearing up to irradiate food, in addition to their current service, which is sterilizing medical supplies by irradiating them (exposing them to radioactivity). Radiation of food is being promoted as an alternative to treat food with pesticides, fungicides, and other preservatives.

Critics of irradiation, including environmentalists and antinuclear groups, say all the chemical byproducts of the process aren't fully understood and may pose cancer risks. They say irradiation will increase the hazards of producing, transporting and storing the radioactive isotopes to treat the food. With seven irradiation plants in the state, New Jersey is one of the leading centers of the irradiation industry. Radiation Technology Inc. of Rockaway has two irradiation plants in the state and is building a third. Isomedix, Inc. of Whippany, the country's biggest irradiation company, is building its first all-food irradiation plant in California.

The American Medical Association (AMA), the World Health Organization (WHO) and other supporters of irradiation say the process greatly increases the shelf life of fruits, vegetables and meats, reducing dangers of food-borne illnesses and lessening world hunger by reducing the spoilage that some estimates say claim a quarter of the global production of food. Twenty countries, including Japan, the Netherlands and South Africa, irradiate their food. In the U.S., only spices (only 1% of them) are treated with radiation. In April, 1986 the Food and Drug Administration (FDA), having already approved irradiating potatoes, onions and spices, issued rules allowing the treatment of some fruits, vegetables and pork at restricted doses. The FDA says its new rules, with an estimated dilution of radiolytic products (the chemical byproducts of irradiation) at 3 parts per million of consumable food, is so minuscule as to pose little threat to humans.

---Peter Montague

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**LUNG CANCER OVERTAKES BREAST CANCER AS #1 KILLER OF U.S. WOMEN**

The American Medical Women's Association is beginning a nationwide campaign against smoking. In 1985, lung cancer overtook breast cancer as the leading cause of cancer deaths in women. The trend is expected to continue, with an estimated 41,100 lung cancer deaths in 1986. Lung cancer remains the leading cause of cancer deaths in men, with 87,000 deaths in 1985 and 89,000 in 1986. The campaign is the first concerted effort by women who are physicians to tackle smoking as a problem of particular concern to women. Besides lung cancer, smoking has been linked to heart attacks, cardiovascular disease, strokes, emphysema and problems related to pregnancy and childbirth, including low birth weight and an increase in the risk of miscarriage, premature delivery and neonatal death.

---Peter Montague

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Descriptor terms: water pollution; epa; lead; drinking water; remedial action; watertest corporation; testing; monitoring; nj; american medical association; who; fda; food; food irradiation; radiation; pesticides; preservatives; fungicides; radiation technology, inc; isomedix, inc; japan; netherlands; south africa; food safety; lung cancer; smoking; females;