

BRAINSTORMS:

Sicker, Sicker, Sicker

Madison Avenue's latest definition of death, bouncing around New York last week, will hardly tempt the conservative editors of Stedman's Medical Dictionary: "It's nature's way of telling you to slow down."

FALLOUT:

Moment of Tooth

Any child with a wobbly baby tooth is a person of consequence in St. Louis, Mo., this week in the world's first regionwide analysis of baby teeth for radioactive strontium-90 content. Mayor Raymond Tucker has proclaimed it "Tooth Survey Week" and thousands of elementary-school children, their parents, and their dentists are being urged to mail the entire fallout of baby teeth to the survey's headquarters. Instead of dimes or quarters from the Good Fairy, the kids are being rewarded with buttons reading "I Gave My Tooth to Science." The award for adults is the knowledge that they are helping scientists gauge how dangerous strontium-90 may be.

Ever since 1952, when the first H-bomb scattered a load of strontium-90 high enough into the stratosphere for it to float around the earth, worried parents have been asking: How much of this radioactive cousin of calcium, which concentrates in milk, is finding its way into the bones of growing children? Enough to cause leukemia and other cancers? The data is only fragmentary, and scientists disagree as to its interpretation.

Decrease: For one thing, there is the question of how much strontium-90 produced by nuclear tests is still slowly sifting to earth. Most experts had figured a third was still aloft and wouldn't come down until 1966. Now, however, Prof. J. Laurence Kulp, who conducts fallout research at Columbia University, reports that high-altitude Air Force planes have found only 10 per cent of the total still in the stratosphere; and this should come down, he predicts, by 1962. With a nuclear-test ban, strontium levels should decrease from now on, he says (Newsweek, April 18).

But what about the children who have done their growing while strontium-90 levels were high—are they liable to develop cancer? No one can an-

Depopulator

With birth-control pills for women showing promise, progress was reported last week on an oral contraceptive for men. Dr. Warren Nelson, medical director of the Population Council at Rockefeller Institute, told an American Chemical Society symposium in Cleveland that various drugs taken over a two-week period render a male sterile for two months. But so far, all have troublesome side effects.

swer with certainty, but St. Louis' "Operation Tooth" is one way scientists have of finding out. Eventually, the St. Louis researchers hope to compile an index that will enable a scientist to use teeth alone in determining how much strontium is being absorbed by a child. At the same time, the study aims to show exactly how much strontium has been absorbed by St. Louis children since fallout began in 1952.

To the citizens of St. Louis, the question is not merely academic. Since 1957, when the U.S. Public Health Service be-

gan checking the strontium content in milk, St. Louis levels—for reasons as yet unknown—have averaged higher than the rest of the nation. And the level has been rising, from 10 micromicrocuries in 1957 to a new, early-winter high of about 24 mme's,* reported by the USPHS this week. Worried by the phenomenon, a group of St. Louis citizens got together just two years ago and formed a non-profit educational organization called the Citizens Committee for Nuclear Information (it now has a membership of 70 scientists, many from the city's Washington University, and 1,000 volunteers—including the president of one of St. Louis's biggest dairies). A few months later, the committee decided to undertake "Operation Tooth."

The Catalogue: In its first year and a half, the project—directed by an internist, Dr. Louise Reiss, and run by volunteers from the committee—collected and catalogued 17,000 baby teeth. Now, with a recent U.S. Public Health Service grant of \$197,454 to Washington University's School of Dentistry for a laboratory to analyze the teeth, the goal is 50,000 teeth in 1960 alone.

Most of the teeth are sent in by parents, though baby teeth extracted by the city's dentists, dental clinics, and school nurses also are routed to "Operation Tooth" headquarters. Each tooth is accompanied by a brief data sheet including such information as "year tooth came out," "[child's] birth date," "breast fed?" and "kind of milk in formula?" The information is recorded, the teeth are sorted out according to kind and age group, and are then sent to the laboratory where they are ground up and analyzed.

Others: Several other U.S. cities have asked about joining "Operation Tooth." If they do, Dr. Reiss says they will have to collect and sort their own teeth. With an estimated half million baby teeth falling out in St. Louis each year, her volunteers will be too busy to help.

"No scientific group as such could possibly tackle the teeth collecting," Dr. Reiss pointed out. "It's a big, backbreaking job—this is probably the largest research study that has ever depended to such a degree on public participation. Fortunately, we have several hundred volunteer workers. We're going to need them all."

*Scientists have arbitrarily set the safe dosage of strontium-90 at anywhere from 33 micromicrocuries to 50 mme's—a disparity which the Congressional Committee on Atomic Energy promises to thresh out during its hearings in May.



This gerbil (cousin of a mouse), leaning nonchalantly on a model of a human heart, has reason to be cheerful. Unlike most animals, including humans, this African rodent's blood vessels never clog with cholesterol. Lederle Laboratories scientists are now studying the gerbil for a clue to controlling cholesterol in humans.