

## PUBLIC HEALTH

# Agree on Fluoridation

The majority of Americans queried on the question believe fluoridation is beneficial, yet only one in three persons using public water supplies is receiving fluoridated water.

► AMERICANS who think fluoridated water is beneficial outnumber those who do not by three to one. Yet, fluoridated water is provided to only one of every three using public water supplies, facts compiled by the United States Public Health Service show.

Fluoridation as a measure effective in preventing 60% to 70% new tooth decay was approved by the U. S. Public Health Service in 1951 after 20 years of research and testing. Today, every major scientific and professional organization concerned with health has approved fluoridation and attested to its safety, effectiveness and practicability.

Dr. Donald J. Galagan, chief assistant in the division of dental public health at the U. S. Public Health Service, cites a recent national poll taken in the U. S. in 1957 that shows 53% of the people think that fluoridation is beneficial. It was an Elmo Roper Poll.

Eighteen percent of those polled think it is not good, while 29% admitted that they do not know anything about this important health measure.

Despite this three-to-one ratio, municipal battles over fluoridation have been violent. Fluoridation has been defeated in local referendums more often than it has been approved, Dr. Galagan said. He feels that such referendums do not necessarily reflect what the majority want. Secretary Arthur S. Flemming, of the Department of Health, Education and Welfare, is expected to present examples of just such minority action that has prevented the fluoridation of water supplies in many communities.

Three separate groups oppose fluoridation, according to the U. S. Public Health Service.

1. Those who oppose the measure because of personal anxieties aroused.
2. Those who acquire social status, political gain, or personal profit by opposing it.
3. Those who are fearful of change and suspicious of authority.

These persons can exert their will at the polls where their votes outnumber the majority who are in favor of fluoridation but who are also to apathetic to get to the polls and cast an affirmative vote, Dr. Galagan pointed out.

Water fluoridation is simply the adjust-

ment of the fluoride content of a water supply to a level that will reduce the amount of new tooth decay.

Since 1945, when fluoridation was introduced on an experimental basis, more than 1,500 cities have instituted the procedure, Dr. Galagan reported. A total of more than 32,000,000 people are now using water that has been adjusted for its fluoride content. This includes many major cities such as Chicago, Philadelphia, St. Louis, Baltimore, Washington, San Francisco and Indianapolis.

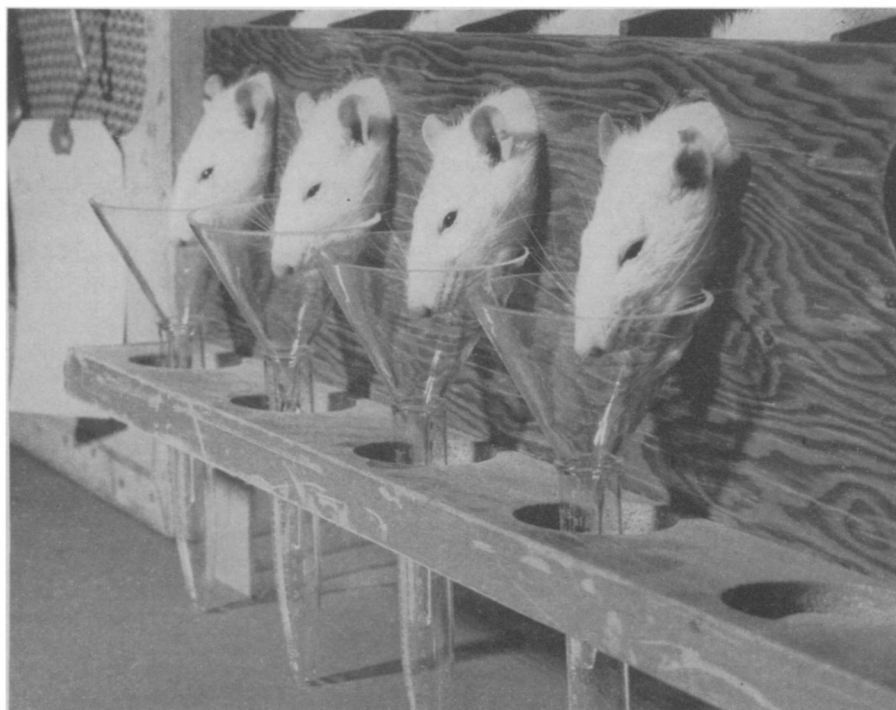
Yet, a total of 78,000,000 people reside in communities where there is no fluoridation. Objections to fluoridation, however unfounded, or unrealistic, strike a sympathetic chord in a sizable number of people. Most of the "scientists" who come before administrative or legislative bodies in opposition to fluoridation have little or no standing in their profession, Dr. Galagan pointed out.

Dr. Galagan charges opposition groups beat the indifferent or uninterested affirmatives at the polls and that these chronic opposers prevent communities from sharing the benefits of a tried and approved dental health measure.

The Public Health Service researches show that flouride strengthens the teeth of children and thereby helps prevent decay and loss of teeth. The benefits continue into adulthood, resulting in better teeth for life.

Recent data on numbers of teeth saved, even in communities where fluoridation has been in operation for as little as four years, indicate that reduction in the number of decayed teeth may be greater than the 65% predicted in the early days of the program.

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**TOOTH DECAY RESEARCH**—White rats contribute saliva samples for research into the causes of tooth decay. Although not an essential cause, saliva is believed to contribute to tooth decay along with heredity, age, bacteria, diet and other factors. A 21-year-old project sponsored by the U.S. Public Health Service is being conducted at Michigan State University by Drs. Harrison R. Hunt, Carl A. Hoppert and Samuel Rosen.

## ASTRONOMY

## Russians Send Rocket Orbiting Sun

► THE "COSMIC ROCKET" launched by the Soviet Union in early January, is now the first man-made planet, orbiting the sun. (See p. 41.)

The rocket, according to Russian radio reports, was a multi-stage one that weighed in its final stage, without fuel, 3,245 pounds. Instruments designed to measure cosmic rays, the amount of gas in interplanetary space and the impact of solar particles as well as the measure of the moon's magnetic field (if one exists), weighed a total of 796.5 pounds. Coded messages were sent by several radio transmitters in the "planet," sending in the 20 megacycle region and one sending on the frequency of 183.6 megacycles.

Speed of the rocket at the time it escaped the pull of the earth's gravitational forces was said to be seven miles per second.

A special timing device, designed to release sodium vapor in space so that the rocket could be tracked visibly by scientists, was reported to have resulted in a Russian photograph of the sodium cloud.

The cosmic rocket passed within about 5,000 miles of the moon on Jan. 3, and entered its sun-circling orbit on Jan. 7.

Science News Letter, January 17, 1959