

VALENTINE—The real human heart, marvelous pump for the human system, does not look too much like the artist's symbol for this organ. Here is a human heart, in its anatomical detail, broken in half, not by love or sorrow, but to show its inner workings.

DENTISTRY

Brushing Cuts Caries

Careful brushing twice daily reduces tooth decay nearly 10 per cent. Use of ammoniated tooth powder cuts new decay over 20 per cent.

➤ CAREFUL twice daily tooth brushing reduces new tooth decay 9.3%. The same regular brushing with a special ammoniated tooth powder reduces new decay 20.5%.

That is the official score from a two-year tooth brushing study by the originator of the ammoniated tooth powder, Dr. Robert G. Kesel, and his associates at the University of Illinois College of Dentistry

The two-year project is reported in detail in the Journal of the American Dental Association. (Feb.) The Journal's editor calls it "probably the most comprehensive and carefully conducted study of its kind ever undertaken."

Included in the study were more than 1,700 school children in Aurora and Peoria,

The children were 10 and 11 years old at the start of the study. This age was selected because it is one of high susceptibility to tooth decay.

The children were divided into four groups. Those from high, middle and low

incomes were included in each group. Group A was given a tooth powder containing no ammonia or urea. Group B got a powder containing 5% dibasic ammonium phosphate and 3% urea. Group C got the same tooth powder made with 5% bentonite, a colloidal clay included because of its adhesiveness and cleaning properties.

Group D served as a control. These children were left to follow their usual tooth brushing habits at home. The other three groups brushed their teeth at 9 a.m and p.m. every day under their teacher's supervision at school and were urged to brush their teeth in the same way at home after the evening meal, before retiring, and on Saturdays, Sundays and holidays.

Examinations, including X-rays, were made at the start and end of the study by two dentists from the Illinois State Health Department. These dentists did not know which children were getting ammoniated or other tooth powder or none until after their examinations were completed.

The report published in the dental journal covers only the Peoria children. This is because a large number of Aurora children were shifted to junior high school, where tooth brushing could not be supervised and also because Aurora drinking water contains one part per million of sodium fluoride. This might have some decay-checking effect which Peoria water would not have and so influence the results.

In the control group the average number of teeth attacked by decay per 100 at the end of the two years was 12.80, compared to 11.62 in the group brushing with a nonammoniated tooth powder and 10.18 in the group brushing with ammoniated powder without bentonite.

Dr. Kesel and his associates in the study, Dr. Douglas W. Kerr, and the dental journal editor all stress the fact that the study shows the anti-tooth decay effect of frequent, careful brushing of the teeth as well as of the ammoniated tooth powder.

Science News Letter, February 10, 1951

In a northern district in Siam where 50 out of every 1,000 persons had malaria in 1949, the rate was reduced to seven out of 1,000 five months after intensive spraying with DDT.

