

DENTISTRY

Deaf Smith County, Texas, Points Way to Sound Teeth

Native Residents of County Aged From Two Years to Middle Age Have Not a Single Decayed Tooth

DEAF SMITH County, in the Texas "panhandle," may give the world a chemical formula for preventing tooth decay, it appears from preliminary studies reported by Dr. Edward Taylor, director of the dental division of the Texas State Department of Health, at the meeting of the American Dental Association in Houston.

The sound teeth of residents of that county so impressed a dentist in one of its towns, Hereford, that he suggested a study of local food and water intake might prove valuable.

Following this suggestion, the teeth of 43 native-born continuous-resident persons in and around Hereford, chosen at random by a teacher and an NYA worker who knew nothing of local conditions, were examined. Not a single decayed tooth or filling was found in the teeth of these people whose ages ranged from two years to past middle age, Dr. Taylor reported.

Equally if not more impressive was the finding that people who moved into the county from other states, with the usual number of cavities and fillings, after having lived there a few months ceased to develop further caries. Even a few cavities in the teeth brought there as much as five years previously with active decay had ceased to be active and the cavities had acquired hard, glazed floors and surfaces.

Tooth decay in Deaf Smith County, according to conclusions reached so far, is only about one half as much as the lowest amount heretofore reported in the United States and much lower than the average.

Deaf Smith County is part of a high level plain, the top soil a dark, sandy loam, below which there is clay containing a high percentage of calcium carbonate. Moreover, wheat ground in Hereford mills has a high protein content, and is about six times as high in phosphorus as the average standard flour. Milk samples at a local creamery contained 30% more phosphorus than accepted standards.

"This indicated that possibly all veg-

etables, dairy, and meat products of the area are comparably high in these elements so necessary to building and maintaining tooth tissue," said Dr. Taylor, who noted that every rural and many of the urban homes have one or more windmills, drawing water from a depth of 70 or 80 feet—water that has abundant fluorine and calcium.

Dr. Taylor declared his group believes a formula can be arrived at which will produce a high degree of immunity to tooth decay by the proper combination of fluorine, phosphorus, calcium, vitamin D, and possibly other factors in the food and water intake.

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Selectees Rehabilitated

ONLY encouraging factor in the high percentage of Selective Service rejections for dental defects "is that many dentally deficient registrants can be rehabilitated by proper dental service so that they can assume their military obligations," Dr. Wilfred H. Robinson, of Oakland, Calif., president of the American Dental Association, declared.

Dentists were not surprised that more than 20% of all men called for Selective Service were rejected for dental defects, Dr. Robinson said. Predictions of the Association's officers, based on facts in hand a month before the first draft number was called in 1940, were "borne out virtually to the last decimal point."

"Dental service must be made available to all groups of the population," Dr. Robinson declared. "Preventive dental care must be emphasized to prevent the tremendous accumulation of dental defects in the future. The coming generations must be kept free from the burden of neglected, accumulating and destructive dental disease."

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New Anesthetic

ARELATIVELY new anesthetic, pentothal sodium, has satisfactorily replaced "laughing gas" for putting pa-

tients to sleep when they are to have teeth drawn, Dr. Berto A. Olson, of Hollywood, Calif., reported to the American Dental Association.

Instead of having a mask put over his face and being told to "breathe deeply" of the sweetish gas, nitrous oxide, the patient gets the new anesthetic by a "shot" in the arm which puts the chemical into a vein.

"The recovery period is from 10 to 15 minutes without any symptom of sickness at the stomach," Dr. Olson said. During the operation, "the patient will open the mouth when told to, but later on will have no recollection of having done so."

Soup, tea or coffee is given the patient afterwards in the recovery room.

Results have been so satisfactory that pentothal sodium is now used for 90% of the patients. Nitrous oxide previously was used for 90%, Dr. Olson said.

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Why Dentures Look False

FALSE TEETH look false or like a "mouthful of teeth" largely because the cuspid teeth, where the teeth "turn the corner" are placed too near the center and are not made large enough, Dr. Irving R. Hardy, of New York, stated.

Use of acrylin resin in back teeth of store sets, he said, prevents the clicking sound which signals the fact that many a person is using false teeth.

Too many artificial teeth are flat, instead of being convex, and yield unnatural light reflections.

The deadly monotony of color can be varied, with a more natural appearance resulting, by some use of light mineral stains, especially for older people.

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Decay Theory Doubted

THE THEORY that tooth decay is related to the amount of calcium and phosphorus in the saliva "must be abandoned," Dr. W. W. Wainwright, of the University of California College of Dentistry, told the American Dental Association.

With some difficulty, Dr. Wainwright and associates found 90 persons with no decayed teeth whose saliva could be studied and compared with that from 108 persons with a large number of cavities. So far as the calcium and phosphorus contents of the saliva from the two groups was concerned, there was not enough difference to get worried about, Dr. Wainwright told the dentists.

Previous reports relating tooth decay to the amount of calcium and phosphorus in the saliva, he asserted, were based on examinations of too few persons to give a correct answer.

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For Infected Jaws

GOOD results with sulfathiazole treatment in 53 cases of infected jaws were reported by Dr. George C. Albright, of Greenville, South Carolina.

"In the short time sulfathiazole has been in existence, I am fully convinced that it is to play a major role in the treatment of jaw infections, especially the acute type infections—namely, the sore and infected lower third molar which is so prevalent, inflammation of the bone marrow in the upper and lower jaws, and in acute abscesses," Dr. Albright said.

He regularly applies the drug locally to sockets immediately after tooth extraction, and declared that in 300 cases healing was accompanied by less after-pain than in his previous experience.

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ZOOLOGY

Pink-Eyed Opossum Found in Oklahoma

A QUEER-LOOKING, ghost-like animal was seen up a tree near Cushing, Oklahoma. Captured, it was quickly recognized as being nothing but an albino opossum, half-grown. Its eyes were pink, with apparently no pupils. It was named "Pinkie."

"Pinkie" has won brief fame in *The Journal of Heredity* not because of its over-laundered, bleached-out appearance—albinism appears among many animals, from man to lobster—but on account of the nature of its coat, which is fine and lacks bristles.

The covering of the ordinary opossum is made up of a mixture of long bristle-like hairs and a fine under-fur. A. Lindsay, Oklahoma fur dealer, told Dorothy Mae Smith of the Oklahoma State College for Women, Chickasha, that the albino opossums he has handled never had any true fur at all: that it was all hair.

Albinism has an heredity basis in the opossum as in other vertebrates. True albinism is always a recessive. "Pinkie" is unique because of the hair-like condition of his fur. At any rate, it seems this feature of an albino opossum has never been noted before. That's why "Pinkie" gets into print.

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MEDICINE

Gray Hair Must Be Endured: Cure a TNT Ingredient

Para-Aminobenzoic Acid, Which Ordinarily Sold for A Few Dollars a Pound, Is Now Almost Unobtainable

AMONG trials that must be endured for the duration is gray hair.

Countless men and women are probably turning gray from worry and nervous stress in these days of national emergency. Maybe success in curing their gray hair would heighten morale, perhaps even lead to victory. Scientists have discovered a medicine, para-aminobenzoic acid, that cures the gray hair, but—

The medicine that blasts gray hair is made from the same stuff, toluene, that goes into TNT.

First questions asked when success of the gray hair cure was announced were: Where can you get the medicine? How much does it cost?

Experimenters at first believed that the chemical could be obtained for about 10 cents a pound. Digging for more exact information among the people who make it, not for medical use but for research and industrial purposes, it was learned that national defense has interfered with production and for the present the chemical is practically unobtain-

able, at any price, for the cure of gray hair.

Specifically, du Pont makes a technical grade of para-aminobenzoic acid, has sold it for \$1.40 per pound in 150-pound barrels, but their production "is quite limited under present conditions; we have been unable to fill all of the orders offered to us by our regular customers and consequently are unable to currently make any new commitments on this product."

A purified grade of para-aminobenzoic acid for use in research and experimental work (the technical grade is used as an intermediate in dye manufacture) has been supplied by the Eastman Kodak Company at \$8 for 500 grams (about one pound). Their present supply is exhausted, and they cannot make any more because the starting material, toluene, is needed for national defense. They believe the toluene shortage is temporary and, like du Pont, hope within a few months to be able to furnish the anti-gray hair chemical.

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UNIQUE ALBINO

This photograph from the *Journal of Heredity* shows a pink-eyed Albino opossum, unique because of his hair-like fur.