MEDICINE

Colds May Lead to Polio

Sore throats and sinus trouble also may pave the way for infantile paralysis, evidence from outbreak in boys' school indicates.

➤ BAD COLDS, sore throats and "sinus" trouble may pave the way for an attack of poliomyelitis, or infantile paralysis as it is also called.

Evidence suggesting this is reported by Drs. Theodore H. Ingalls and W. Lloyd Aycock of Harvard. (NEW ENGLAND JOURNAL OF MEDICINE, Aug. 9).

The evidence comes from heretofore unpublished findings about an outbreak of polio at St. Mark's School for boys at Southboro, Mass. The outbreak occurred in the last half of May, 1936. This, the Harvard scientists point out, was an off-season in an off-year for polio.

Among the 190 boys at the school, 22, or 11%, were attacked by polio between May 16 and June 1. During all of 1936, there were only 60 cases of polio reported for the entire state of Massachusetts, which had at that time population of almost four and a half million.

This "explosive" outbreak at St. Mark's came at the end of a spring season when there had been more cases of nose and throat infections, colds and sore throats, than in the next 10 years. In April and the first half of May, 52 boys had colds or similar upper respiratory infections bad enough so they had to be sent to the school infirmary.

During the period of May 1 through May 20, almost half, or 41%, of boys who later developed polio had colds, while only 19% of others in the school had such illnesses. The interval between the two types of illnesses in 10 boys averaged nine and a half days. The incubation period for polio, that is the period between the virus getting into the body and sickness developing, is generally put at seven to 14 days.

An upper respiratory infection, such as a cold, is only one of a number of factors that may predispose to polio, the Harvard scientists point out. Removal of tonsils and immunizing "shots" against diphtheria and other diseases have been reported as predisposing to polio if done during the month before a child is likely to be exposed to the virus.

These factors, the Harvard doctors suggest, may explain why big polio years come and go without the rhythm or predictability that characterizes childhood diseases such as measles in which the factor of exposure determines the presence or absence of disease in susceptible persons.

Science News Letter, August 25, 1951

NUTRITION

New Nutrition Stars

➤ VITAMINS are being pushed into the background. Antibiotics, such as penicillin and aureomycin, are the new stars in the nutrition picture. This change and what it means for the future are pointed out by Dr. H. R. Bird of the U. S. Department of Agriculture's Bureau of Animal Industry. (SCIENCE, Aug. 10).

Man and his domestic and pet animals will, of course, continue to need vitamins in their daily diet. But, Dr. Bird says, accepted figures for amounts needed of known vitamins and other nutrients will need to be changed. The importance of micro-organisms—germs to the layman—in the digestive tract of non-ruminant animals needs to be re-evaluated.

"The opportunity to increase materially the efficiency of meat production" is the third consequence he foresees from discovery of the the nourishing role of antibiotics originally developed as remedies for germ infections.

"Research in nutrition has been dominated by vitamins for 30 years," he states. "This domination is by no means ended, but the time must come when the last vitamin will be apprehended, catalogued, civilized and put to work."

In a way, it was the vitamins that led to discovery of the growth-stimulating action of the antibiotics. This had first been discovered at the University of Wisconsin in 1946. Researchers there found then that feeding streptomycin with an experimental purified diet stimulated the growth of chickens.

The nutritional role of the antibiotics was rediscovered in 1950 incidentally as a result of the development of vitamin B-12 concentrates from by-products of antibiotic manufacture. Some of these B-12 concentrates were more effective than others in stimulating growth. The extra effectiveness was traced to the antibiotic left in the concentrates.

The usefulness of antibiotics for nourishment seems to be limited to growing non-ruminant animals. In the diet of ruminants, such as cows, they are harmful.

Dr. Bird's figures show that about 5% of the animal production of aureomycin, penicillin and terramycin would be needed for the annual production of three and one-half million tons of broiler chicken feed.

Science News Letter, August 25, 1951

ZOOLOGY

New York Zoo Has Baby Lowland Gorilla

See Front Cover

➤ A NEW BABY gorilla has been adopted by the New York Zoo. He will replace Makoko, the much admired Lowland Gorilla that recently was accidentally drowned in the moat which serves to enclose the animals without bars.

The baby is named Mambo. Probably a little over a year old, he is now in the Animal Nursery where he follows a routine not very different from that of a human infant. He is fed four times a day—cereal, vegetables and fruit, milk and vitamins. He takes a bottle like a baby, being fed by Mrs. Helen Martini who is responsible for his care.

The picture on the front cover of this week's SCIENCE NEWS LETTER shows Mambo enjoying his daily grooming at Mrs. Martini's hands.

Science News Letter, August 25, 1951

GENERAL SCIENCE

Iron Curtain Countries May Get U. S. Journals

➤ THE BAN on the mailing of technical and scientific publications to Russia and the Iron Curtain countries is to be lifted, John Donovan, chief of the Technical Data Section, Office of International Trade, Department of Commerce, told SCIENCE SERVICE.

The ban was put into effect March 2 and prevented Iron Curtain subscribers of magazines—available on American newsstands or in libraries—from receiving their copies by mail.

A similar ban on the export of unpublished technical data will remain in effect, however, Mr. Donovan said. This would include detailed drawings of apparatus, plans of factories and other material not generally available to the public.

The ban on magazines raised protests from scientific and engineering societies when it was put into effect in March. They pointed out that their magazines were readily available to anyone who wanted to read them and that the ban would in no way keep the information in the magazines from the Communists.

It was also pointed out that scientific and technical journals do not publish classified information.

Science News Letter, August 25, 1951