

Medicine

COMMON COLDS

By JAMES A. TOBEY

DESPITE the immense progress of medical science since the days of Hippocrates common colds and other respiratory diseases continue to plague humanity. Today they cause more absenteeism from industry, school, and general activities than all other diseases combined, and they also cause greater economic losses.

These facts will probably not be news to most persons, since no one is immune to colds, and practically everyone averages three of them a year. So serious is the problem that many organized efforts have been made and are being made to ascertain how best to cope with these devastating ailments. Among the most promising of such endeavors are studies carried out at the Johns Hopkins University under the auspices of the John J. Abel Fund for Research on the Common Cold. Valuable investigations have been made also by physicians at the Harvard Medical School, at Columbia University, by scientists of the Rockefeller Foundation, and by many others. Current medical literature is heavy with articles on the subject.

From this profusion of material certain fairly well-established facts may be gleaned, as follows:

1. Colds are contagious.

2. A contributing factor in catching cold is the vital resistance of the individual, as influenced by heredity and such environmental conditions as climate, ventilation, nutrition, and general health.

3. Colds occur at all ages, but are most common in children under five and in the age group from twenty-five to thirty-five years.

4. Men are slightly more susceptible to colds than women.

5. Colds occur at all seasons of the year, but are most prevalent in the United States in September and October, in January and February, and in April and May.

6. The presence or absence of tonsils and adenoids in children and adults and the structure of the frontal sinuses of individuals have no effect on the incidence of colds.

7. Hardening by regular exercise, sleeping with open windows, cold bathing, or exposure to ultraviolet light, does not decrease susceptibility to colds.

8. Racial factors play no part in their prevalence.

9. Changes of weather, especially in Summer, may promote susceptibility to colds in certain persons.

10. There is evidence that a proper diet may reduce susceptibility.

11. Vaccines are of questionable value.

12. Patent medicines and drugs will not cure colds.

13. A cold may sometimes be aborted by prompt measures and occasionally, but rarely, its symptoms may be alleviated by proper treatment.

When a person declares, mournfully, that he has a cold, he may actually be suffering from any one of a dozen different diseases. The true common cold begins rather suddenly with a profuse running of the nose, or coryza, a watery discharge from the eyes, some fever and a feeling of general malaise. These symptoms continue for several days, after which the martyr gets better or worse.

Such a cold as this is caused by a specific virus. Still other symptoms may, however, be due to other germs, a host of which are regular inhabitants of the respiratory tracts of all persons. Because of the lowered resistance of the individual, these playful streptococci, diplococci, staphylococci and whatnot have their innings, thus causing sore throats, coughs, expectoration, and numerous other symptoms,

which may be classified as bronchitis, laryngitis, pharyngitis, rhinitis, tracheitis, or tonsillitis, or by numerous other medical terms, which are usually based on the location of the disturbance and mean inflammation (itis) of that part.

Influenza, also called flu or grippe, is still another disease with still another cause. It begins suddenly, with fever, aches in the bones and other parts of the body, and a feeling of great weakness or even prostration. The exact cause of the disease is a question, some scientists attributing it to a bacillus discovered in 1893, others alleging that a green-producing streptococcus is at fault, and still others asserting that the cause is a filtrable virus, similar to that which produces common colds. At any rate, the disease has been proven to be highly contagious, a fact confirmed by the periodic epidemics that occur.

The idea that colds are contagious is not new, since it was first advanced in 1914 as a proved proposition by a German scientist who called the cold bug he thought he had discovered *aphanozoum coryzae*. A number of investigators have transferred filtrates or washings of the nasopharyngeal secretions of persons with colds to chimpanzees or human volunteers, with the result that these apparently healthy individuals promptly came down with colds. Such experiments show that the cause of colds is the filtrable virus.

Of even greater interest, however, are observations among the inhabitants of isolated communities where respiratory diseases have been absent until brought in by an infected person. Several years ago physicians of the Rockefeller Foundation engaged in studies of the nasopharyngeal flora of some 150 persons comprising the population of the remote village of Northwest River in Labrador. During the Winter these people, consisting of natives and

about twenty-five whites, were free from colds, but when the first mail boat brought Summer visitors to the region the germs accompanied them, for a flock of colds occurred. By August, there was an epidemic of tracheitis, or inflammation of the windpipe.

More striking than this was an experience at Northwest River in the following Winter. In February, 1928, the superintendent of the local mission went by dog-train to Rigolet, 100 miles away, to get the mail which had come up the coast by relays of dog sleds. Influenza was prevalent in Rigolet when he arrived there, and he contracted it, as he was taken ill on the return trip while still a day's journey from Northwest River. With the help of his dogs he managed to complete the trip.

Two days later another case of the flu appeared in this isolated community, which had hitherto been free of it. By the end of April, 90 cases had occurred in a population of 167, and 31 other persons suffered from colds. Of the 46 who escaped, 6 were new-born babies. Fortunately no deaths were caused by this epidemic, although some of the cases were severe, especially among the older adults.

The investigators who made these studies in Labrador later transferred their activities to a tropical island. They went to St. John, an isolated spot in the Virgin Islands, where they examined the 223 natives living in the vicinity of Cruz Bay. Colds were found to be less prevalent in the West Indies than in most places and less severe, but the same types of germs were associated with these diseases when they did occur. In December, 1929, an epidemic of colds followed a slight but abrupt drop in atmospheric temperature.

Since the cold organism is transmitted from person to person, one of the ways to avoid catching cold is to stay away from

those who are infected. Modern urban conditions, with their crowds in subways and street cars, present many almost insurmountable difficulties to this endeavor, and it is likewise virtually impossible to shun a member of the immediate family who has a cold. During the prevalence of colds and other respiratory infections, osculation should be abandoned as a social procedure, because a kiss on the mouth is a sure way to spread a cold.

Wet feet and drafts have always been thought to play a part in catching colds, and this is no delusion, for they do indeed have a certain rôle. When the feet are cold or wet or both, a temporary lowering of resistance results, so that the body becomes more susceptible to the ravages of the cold virus and the various organisms which are poised in the respiratory tract as secondary invaders. It is a good rule to keep the feet dry and warm as an aid to the prevention of colds. Rubbers and galoshes may look provincial, but they are indubitably utilitarian in wet weather.

Ventilation is unquestionably a factor in the onset of a cold. Many persons are affected by drafts, although most persons can develop a certain immunity to them by becoming accustomed to breezes of all kinds. Some individuals can sit in drafts all day without harm, others begin to sniffle when subjected to a hardly perceptible movement of air. Regardless of any exemption from the hazards of drafts, any over-heated person who becomes chilled by moving air undergoes a drop in vital resistance and becomes fair prey for the germs of a cold.

Sudden changes in temperature are generally injurious to the body. When a person emerges thinly clad from an over-heated house into cold, raw air, he is in imminent danger, unless he, or she, possesses unusual powers of adaptability and

resistance. Proper ventilation in school-rooms, with temperatures held at or below 68°, keep down the incidence of colds among children. When the temperature drops rapidly from 90° to 60° in Summer, as often happens in the North temperate zone, put on an overcoat over your Palm Beach suit, and thus avoid trouble.

Among the matters that do not influence the incidence of colds at all, are smoking, whether mild or excessive, alcohol in moderation, the color of the eyes, chiropractic adjustments, cold bathing, big muscles, Christian Science, and the use of ultraviolet or any other kind of light. This statement will be controverted by the adherents or opponents of these various fads and fancies, but it is based on incontrovertible evidence produced by impartial investigators.

Although common colds are known to be caused by a filtrable virus, the virus itself has never been isolated. As a consequence, it is not yet possible to make a vaccine from it. The various cold vaccines on the market are prepared from organisms that are associated with colds, but chiefly in the rôle of secondary invaders. These mixed vaccines may protect against respiratory diseases due to the germs from which they are made, but they will not protect against the true common cold, nor against other infections caused by organisms not represented in the vaccine. Such vaccines, therefore, have a limited value, and they are not panaceas.

The use of alkaline substances has been suggested as a remedy or preventive of colds, the theory being that a cold occurs because of certain chemical changes in the body. It seems to be the consensus of scientific opinion that alkalis are of no value in averting the onset of a cold, but that slightly alkaline drinks may be helpful immediately after a cold starts. Thus,

hot lemonade, or milk, which is a base-forming food, will aid in combating the tendency toward mild acidosis which is usually one effect of a severe cold.

On the subject of diet there is some difference of opinion. Cod liver oil has long been a favorite remedy for imparting strength and vigor to persons susceptible to colds, and there is reliable scientific evidence in support of it. Cod liver oil, like butter, milk, and egg yolk, is an exceptional dietary source of vitamin A, which is frequently known as the anti-infective vitamin, because an abundance of it in the diet actually promotes resistance to certain types of disease.

Not only have biologists demonstrated by experiments with laboratory animals that a liberal intake of vitamin A protects against respiratory infections, but physicians have conducted studies with groups of industrial workers on diets rich in vitamin A-containing foods, such as milk and cod liver oil, and have observed fewer colds and improved health among these individuals.

When, in spite of all precautions, a cold starts, the best procedure is to go to bed,

induce perspiration by means of hot-water bottles and warm drinks (which may be slightly alkaline), and use only such remedies and medicaments as will reduce fever and allay pain. Such remedies should preferably be those prescribed by a physician and not by a meddling neighbor, although such customary diaphoretics as quinine, aspirin, aconite, tartar emetic, salicylic acid, and phenacetin, which almost everyone uses in one form or another, are generally efficacious to some degree. Nature, aided by rest and repose, does most of the therapeutic work, however.

Everyone has a pet remedy for a cold. The unfortunate sufferer is besieged with ardent advice, deluged with remedies which are advocated with proselyting zeal by all with whom he comes in contact. A celebrated practitioner who was once asked what was best to take for a cold is said to have replied rather tersely, "Two dozen soft linen handkerchiefs," and that seems to be about as good advice as any. Regardless of the measures taken, a cold generally runs its course and then peters out, or is succeeded by something worse.

Music

THE LIFE AND DEATH OF AN AMERICAN COMPOSER

By EDWARD ROBINSON

THE legend runs that Charles Tomlinson Griffes' premature death at thirty-five, thirteen years ago, was due to suffering and hardship caused by the public neglect of his work, and that as a result America lost one of its most gifted composers before he could attain full maturity as a creative artist. The professional commentators, whether deliberately or not, have aided in spreading this myth. Rich-

ard Aldrich, in a New York *Times* obituary, rebuked his readers for permitting Griffes the drudgery of a school-teacher's routine, and hinted at parallels with Mozart and Schubert. John T. Howard implied that he was forced to copy his own parts for the Boston Symphony's first performance of "The Pleasure Dome of Kubla Khan," and said that the strain proved "too great for the already overworked composer," who "fell a victim to an attack of pneumonia" just as the news of his first major success began coming in.

A pretty tale, and one well calculated to