MEDICINE

Pills To Ward Off Colds

Anti-histamine chemicals, used for many allergy conditions, are now claimed effective in checking colds. They are available without prescription.

➤ WARDING off a cold by taking a pill when you first feel the symptoms of a cold coming on is the promise now held out by drug manufacturers and by research reports, published and unpublished, from various parts of the country.

The pills which it is hoped will do this job of stopping the common cold, with its annual bill of billions of dollars and hundreds of millions of lost working days, will contain chemicals known as anti-histamines.

Results with up to 90% success in treating colds by these chemicals have been reported, and reports of even better results are about to appear.

The anti-histamines have been used to treat hay fever, asthma and other allergies, with both good results and failures reported. Until recently they have been sold only on a doctor's prescription. Two months ago (Sept. 2) one of them, with the trade-name of Neohetramine, was released for sale over the counter, without prescription, under the name, Anahist. Last month another of them, named Inhiston, went on sale over the counter.

Probably many others will be available this way within the next few months, since there are many anti-histamine chemicals made by different manufacturers. All of them doubtless will rush to file with the U. S. Food and Drug Administration new or amended new drug applications for over the counter sale of their products.

The American people may become eager guinea pigs this winter in large scale trials of some of these drugs, both as to the effectiveness and safety. Most of what has been known of the anti-histamine drugs so far has come from reports of their use in hay fever and other allergies.

Two limiting factors, one potentially dangerous, have shown up in the allergy studies with the drugs. These are: 1. The same drug that gives relief to one hay fever patient is ineffective in another, and there is no way of knowing without trying the drugs which will be effective in which patient. Whether this will be true in the use of the drugs for warding off colds has not yet appeared.

2. Drowsiness has been the chief unpleasant symptom coming from the use of anti-histamine drugs. This symptom has seemed to affect some patients more than others. It may range from mild to the serious state where sleep would overcome a person while driving a car or operating machinery, with consequent danger to the person taking the drug and to others.

The anti-histamine drugs now released for over-the counter sale for colds are said to have little or none of this effect in the amounts contained in the pills, if used according to directions.

Basis for use of anti-histamine drugs in treating colds is the relatively new idea that a cold is an allergic response to the protein of the cold virus, somewhat as hay fever is an allergic response to the protein of plant pollens. Release of too much of the normal body chemical, histamine, in some persons in response to the protein, is believed the cause of the symptoms in hay fever and, according to the new theory, in colds. Anti-histamine chemicals should control or stop the symptoms by counteracting the histamine.

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ENGINEERING-AERONAUTICS

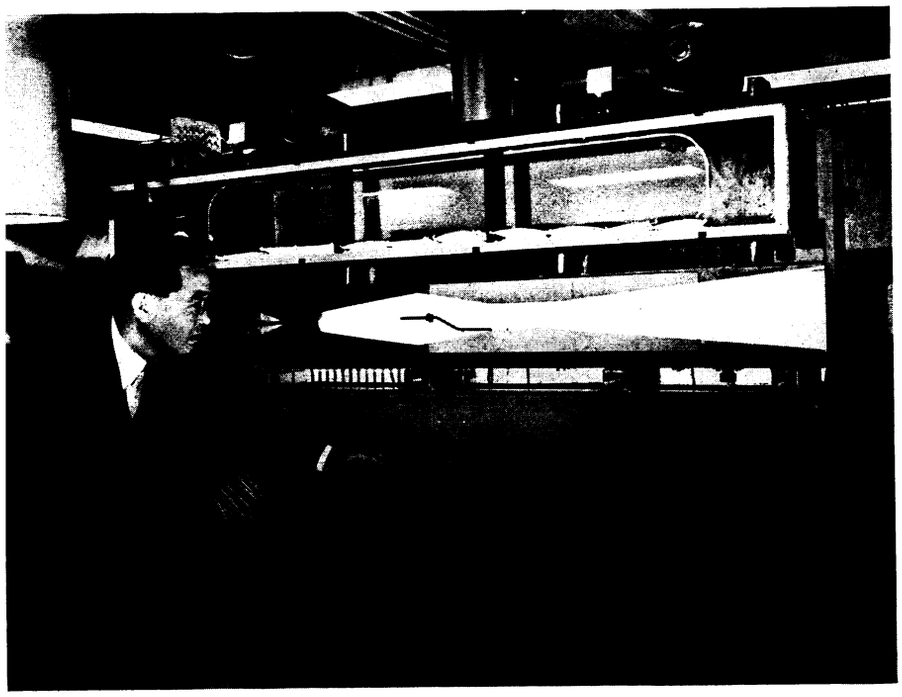
Hypersonic Wind Tunnel

➤ THE highest air velocity in a wind tunnel, ten times the speed of sound or approximately 7,600 miles per hour, is attained in a new tunnel now completed at the California Institute of Technology, Pasadena, Calif. It was designed and built for the Army Ordnance Department.

Previous highest known speed of air flow in supersonic wind tunnels was about seven times the speed of sound. This tunnel is needed by ballistic experts of the Army to develop guided missiles of extremely high speed. It will be used in studying what they call the inevitable intercontinental missiles of the future.

An early use of this so called hypersonic tunnel will be to obtain basic information about the design, performance and instrumentation of tunnels for extreme high speeds. Basic experimental data on shock-waves, boundary layers and the flow past models at hypersonic speeds will be obtained.

The test section of this tunnel, in which models of missiles are mounted, is five by five inches in size, although the entire test section stretches to an over-all length of four feet. To accelerate in the expansion section of the tunnel, air must pass through a slot in the throat of a specially designed



WORLD'S FASTEST WIND TUNNEL—Unprecedented speed in excess of ten times that of sound has been obtained in this wind tunnel. Dr. Henry T. Nagamatsu, Caltech director of the tunnel, is shown examining the test section.