

wrote in a report to the *Journal of Biological Chemistry*. "It has, however, been given renewed emphasis by the exigencies of the food situation during the war."

That paragraph, as the editor of the *Lancet* points out, might well have been written today when nutritionists are gathering forces and laying plans for feeding starving and near-starving peoples whose crops and animals have been laid waste by the present war.

The protein value of yeast, its ability to supplement or substitute for meat, was what made it seem important to nutritionists in 1919, when vitamins were in their infancy. Today we know that it is a very rich source of the B vitamins. It contains more of two of these, riboflavin and the pellagra-preventing niacin, than any other food, the editor of the *Lancet* points out. In addition, it is a good source of thiamin or vitamin B₁, popularly named the morale vitamin, and of vitamin B₆ and pantothenic acid.

Yeast's protein is important both because of the quantity available and because it is of high biological value, like the protein of meat, eggs, milk and other animal food sources.

Adding 5% of yeast to a two-pound loaf of bread would increase the nourishing value of the bread as much as would the addition of one-fourth of a pound of beefsteak or two eggs.

Yeast grows rapidly, multiplying itself eight times in as many hours, which, compared with the rate of producing other high-grade protein food, such as beef or mutton or even eggs or chickens, gives it a tremendous advantage for post-war feeding.

Yeast can be grown very economically on waste molasses, with ammonium salts added as a source of the necessary nitrogen. In the West Indies there is an almost unlimited supply of molasses for this purpose, and *Monthly Science News* reports that the first plant for the manufacture of food yeast is to be set up in Jamaica.

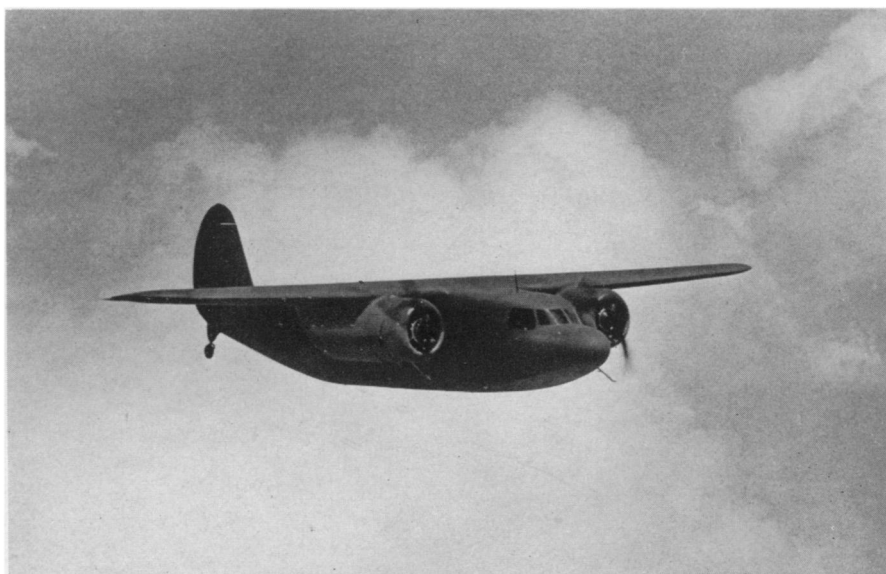
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● RADIO

Saturday, June 12, 1:30 p.m., EWT

"Adventures in Science" with Watson Davis, director of Science Service, over Columbia Broadcasting System.

Dr. George C. Ruhland, District of Columbia Health Officer, will discuss "Health Conditions in War-Crowded Cities."



FRONT LINE DISPATCHER—This steel tubing and plywood plane designed to take off from small fields and carry men and supplies to the actual battle areas is rapidly fabricated and simply assembled for mass production. It is the new Loadmaster, built by Cessna.

PUBLIC HEALTH

Dust Prevents Lung Ill

Contrary to what might be expected, working in dusty trade might lessen susceptibility to pneumonia, investigators find.

➤ **WORKING** at one of the dusty trades may, contrary to what might be expected, lessen rather than increase susceptibility to pneumonia.

This possibility appeared in a report by Dr. Anna M. Baetjer and Dr. Frederick J. Vintinner, of Johns Hopkins University School of Hygiene and Public Health, at the meeting of the American Industrial Hygiene Association in Rochester, N. Y.

Experiments with rats furnished the basis for this view of pneumonia susceptibility in relation to certain dusts. The scientists caution against applying the results too definitely to man until more is known.

The rats were exposed eight hours a day to high concentrations of fine quartz or feldspar dust for periods varying from one day to about five months and were then inoculated with pneumonia germs. For some rats the dust exposure was continued after inoculation with the germs. Control groups of rats were kept under similar conditions but without dust exposure and were given similar inoculations with pneumonia germs.

When the pneumonia germs were given in broth, there was not much difference between "dusted rats" and controls in the rate at which they died of pneumonia. When the germs were given in mucin, however, the mortality was consistently greater among the control rats than among those that had been exposed to the dusts. Mucin is the chief constituent of mucus.

The protective effect of the dusts against the pneumonia germs in mucin increased with the duration of exposure to the dusts. Rats which had developed pneumoconiosis, the lung condition that comes with exposure to certain dusts such as silicia, were completely resistant to a dose of pneumonia germs which killed half the control rats.

The increased resistance of the "dusted rats" to the pneumonia germs in mucin, the scientists believe, was probably due to the absorption of mucin by the dust. This allowed the defense mechanisms of the body to attack the germs which apparently would otherwise be protected by the mucin.

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