

The first bit of tissue studied with the new technic was muscle, but not a kind used for food even in these days of meat

rationing. It was a body muscle of the American cockroach.

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lergy who have been freed from allergic symptoms through appropriate diet are no longer susceptible to colds.

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MEDICINE

## New Food Allergy Tests

Discovery promises to point to specific dietary means for relieving troubles ranging from migraine, indigestion and epilepsy to common colds.

► DISCOVERY of a new test for food allergy which promises to show specific dietary means for relieving a large part of the population from troubles ranging from migraine, indigestion and epilepsy to susceptibility to common colds was announced by Dr. Arthur F. Coca, of Oradell, N. J., at the Fifth Annual Forum on Allergy in Cleveland. Dr. Coca received the Forum's gold medal "for outstanding contribution to clinical allergy."

By means of the new, highly accurate test for food allergy, Dr. Coca stated, he is able to define a new category including migraine, indigestion, constipation, sinusitis, dizziness, tiredness, nervousness, epilepsy, high blood pressure, and a number of other symptoms.

The well-known skin tests for allergy are useless in this group, which probably

includes over 80% of the population, Dr. Coca said.

About two-thirds of the sufferers from food allergy can be wholly freed of the listed symptoms by mere avoidance of the foods identified by the new test, in which the culprit food is shown by a specific speed-up of the pulse rate.

In a small series of cases in collaboration with Major Laurence Miscall, M. C., U. S. Army, the Crile operation of sympathectomy, a nerve-cutting operation, was found highly effective in the control of the listed food allergic symptoms.

Food allergy, Dr. Coca has previously reported, is the most important predisposing cause of common colds. This has been confirmed, he said, by Dr. Arthur Locke, of Western Pennsylvania Hospital, Pittsburgh, in a large scale study at Stevens College. Subjects of food al-

MEDICINE

## Same Defense Mechanism Causes Very Different Ills

► TYPHOID FEVER, syphilis, hay fever and a wide variety of other equally different illnesses are produced by the same reaction of the body against invasion, Dr. Milton B. Cohen, of Cleveland, declared at the Fifth Annual Forum on Allergy.

This is a standard method the body has for dealing with foreign substances which enter it, Dr. Cohen explained. He gave it the scientific term of the "dynamic mechanism of allergic reaction."

"During life," Dr. Cohen pointed out, "the body is always changing. Myriads of chemical processes go on quietly and unnoticed."

When the body is attacked by the entrance of bacteria, pollens or serum, which scientists call antigens, no visible change occurs for several days. The body is building a defense during this period by making substances called antibodies. These neutralize or destroy the antigen which entered.

When these antibodies unite with the antigen, Dr. Cohen explained, a poisonous substance is formed. It is this substance which produces the illness. The disease is therefore the result of the body's defense against a foreign substance.

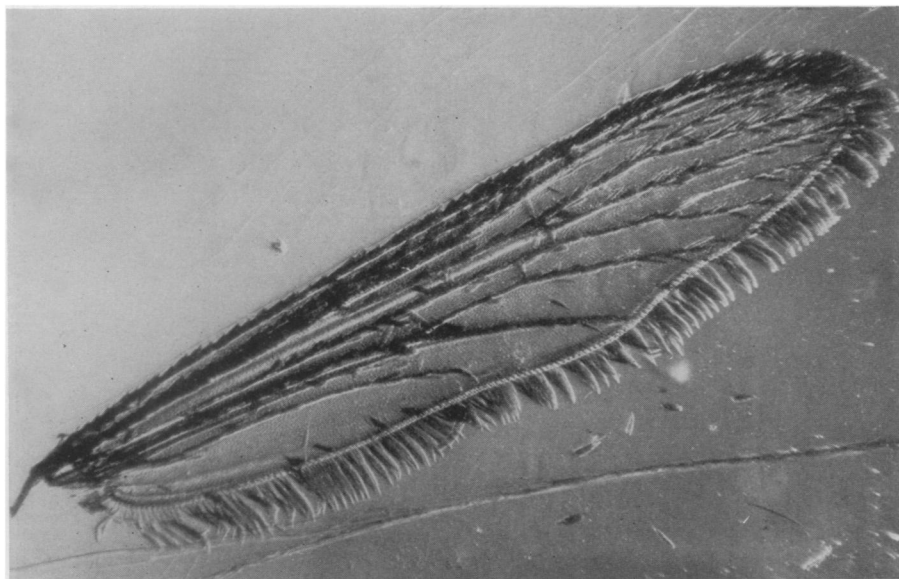
"When the body reacts in this way it is said to be allergic," Dr. Cohen said. "Allergic reactions to non-living substances, such as pollens, dust and sera, produce a common poisonous substance and the same type of illness.

"Allergic reactions to bacteria, however, produce individual types of poisonous substances and different types of illness, depending on the nature of the bacteria."

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*Thermite*, for incendiary bombs, is a mixture of aluminum powder and iron oxide which burns with tremendous heat because of the affinity of the aluminum for the oxygen.

Several hundred acres a week in Panama and Costa Rica are now being cut from jungle and seeded to *manila* fiber plants, to help supply enough rope for United Nations' war needs.



**MOSQUITO WING**—This is the flying apparatus of the summer pest, photographed by Vincent J. Schaefer, of the General Electric Research Laboratory. His original photograph showed the wing magnified 100 times. The fine fringe along the edge is shown at much greater magnification in the picture on the facing page.