

MEDICINE

1918 'Flu Won't Repeat

Influenza viruses and humans have declared a sort of truce that won't allow more than mild epidemics unless new germ develops.

► WE SHALL NEVER have another worldwide influenza epidemic like the disastrous one of 1918, Dr. Thomas M. Rivers of the Hospital of the Rockefeller Institute for Medical Research declared at the meeting of the National Academy of Sciences.

Only if a new kind of flu germ suddenly develops from one of the two known influenza viruses and a large proportion of the world's population is susceptible to the new virus is there any likelihood in Dr. Rivers' opinion of a repetition of the 1918 influenza experience.

Something like a truce has been declared between the known influenza viruses and human beings. This is because rapid transportation of all kinds has made the world one community so far as influenza is concerned. All populations of the world are probably thoroughly "seeded" with the two viruses and people and flu viruses can live in a kind of equilibrium.

We shall probably continue to have mild and moderate flu epidemics here and there throughout the world. The flu viruses may gain the upper hand as new susceptible persons are added to the population with the birth of new babies. This may upset the equilibrium or truce between man and influenza temporarily here and there but a new truce will then be established.

Other highlights in Dr. Rivers' talk on epidemic diseases:

We do not need to worry about cholera and epidemic typhus getting started in this country because the germs would find conditions here unfavorable for their establishment and spread.

Better way than quarantine to keep diseases from spreading across international boundaries is to have a civilization and a standard of living for humans that provide poor living and travelling conditions for germs and the insects and animals that harbor and spread them.

The Island of Sardinia and some island in the South or Central Pacific might be dedicated to scientific studies of the possibilities of stopping diseases spread by mosquitoes by mosquito eradication.

In Sardinia it might be determined just how difficult it is to wipe out the anopheline mosquitoes that spread malaria from a long-established stronghold.

In a small, unimportant Pacific island, efforts could be made to see whether anopheline mosquitoes can be established in regions where they normally do not exist.

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NUTRITION

Man to Know Exact Protein Requirements

► EXACTLY how much protein man himself needs will soon be known, Prof. William C. Rose of the University of Illinois predicted at the meeting of the National Academy of Sciences.

For the first time, nutritionists and physicians will be able to set protein rations for men, women and children on the basis of human needs, instead of

figuring this from what rats or other laboratory animals require.

The rat's protein requirements, long used as basis for setting human diets, may not apply to man, it now appears. Man needs only eight amino acids to fill his protein requirement instead of the nine needed by laboratory animals, Prof. Rose has already discovered.

The discovery that man can get along without histidine in his daily diet was "most unexpected," Prof. Rose stated. Histidine had long been considered one of the essential amino acids, and it is essential for rats.

Meat is not the only source of amino acids, commonly called protein building blocks. It is a good source because it contains all the ones previously considered essential. When meat is scarce, the nutritionist and housewife have to find substitutes by figuring what combinations of other foods will supply all eight essential amino acids. They can do this job better when they know exactly how much of each is needed.

Patients too sick to eat or digest meat now are frequently fed amino acid solutions by vein. If the results are not always satisfactory or if more of these expensive materials are used than need be, it is because physicians have not had exact knowledge of what is required.

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RECEPTION—The Smithsonian starts another 100 years. Dr. and Mrs. Alexander Wetmore receiving in the U. S. National Museum rotunda shake hands with Prof. Maurice Caullery of the French Academie des Sciences, one of the delegates at the meetings of the National Academy of Sciences and the American Philosophical Society.