

various factors, including something which makes it easy for insects such as flies to contaminate food. Flies have previously been shown to carry the virus and, in this experiment, to contaminate food with it.

A further step in testing this theory, the scientists state, will be to conduct a controlled experimental study on the effect of reducing the number of flies during infantile paralysis epidemics.

Science News Letter, May 19, 1945

PUBLIC HEALTH

Epidemics Facing Europe

Poor food supply, such as now exists in parts of Europe, causes infectious diseases to be more dangerous and deadly than when food is plentiful.

► **WARNING** that epidemics have always been bred by wars, Dr. Russell M. Wilder of Mayor Clinic, speaking at the University of North Carolina research conference, declared that poor food supply such as now exists in some parts of war-torn Europe causes infectious diseases to be much more dangerous and deadly than when the population has plenty of food.

"Malaria became so virulent in Greece when the people there were subjected to the starvation occasioned by the German invasion that mortality was terrifying," he recalled. "Malaria spread farther north into Eastern Europe than it ever had before in recent years, as if the soil were fertilized by the misery of the populations of Bulgaria, Rumania and the Russian lands beyond."

More scientific research is needed, he told the conference, on the part that nutrition plays in the resistance of the human body to invasion by the germs of infectious diseases.

The process of getting old and the nature of degenerative diseases now taking heavy human toll may be explained by research on the nature of alterations in the enzymatic systems of the body on which the life of cells and tissues is dependent, he declared. A number of chronic diseases, hitherto of unknown cause, have been reproduced experimentally with diets restricted as to certain vitamins and amino acids.

"Although scientific progress in the science of nutrition was rapid in the period between the two world wars," Dr. Wilder said, "the specialists in the field were far from ready with the answers to the questions that arose with the outbreak of this war. War calls for instant action and demands the best you have to give, no matter how inadequate that may be. The information put to work, although leaving much to be desired,

proved to be of great importance. England's general health, measured by the proportion of infants dying in their first year, became steadily worse in the first World War; in this war it has become steadily better. We also are aware of the difference in the capacity of Germany to resist invasion. The collapse of Germany at the end of World War I was due primarily to lack of the right kind of food whereas, by putting into practice what was known about nutrition, the German people in this war have not suffered from nutritional deficiencies. Indeed, in this war they have used the science of nutrition as a weapon of offense. By purposely depriving prisoners and subject populations of the foods they needed they reduced their power of resistance."

"Planning for the future must include programs of research to improve the nutritive quality of foods," Dr. Wilder said.

"Nothing seems more certain," he continued, "than that eating refined staples in the amounts in which they contribute to most diets—white flour, white rice, white hominy, white sugar—all of them starchy or sugary foods deprived by refinement of varying large proportions of their vitamins and salts, dilutes the dietary to a dangerous extent. We need more knowledge of how best to make these staple foods more wholesome. The answers reached so far are by no means satisfactory. In England undermilled wheat, retaining vitamins and minerals, was made mandatory for the war, but large numbers of people do not like such flour and it is very doubtful whether flour which is undermilled can ever compete in baking qualities with fine white flour.

"Effective efforts have been made in our country to improve white bread and flour by restoring to them the riboflavin,

thiamin, niacin and iron removed in milling. The products thus obtained encounter no objection on the part of the consumer but fail to satisfy the critics who demand that nothing be removed from wheat by milling. Here is room for more research by biochemists, nutritionists and food industrialists. Effort must continue until flour and other staples are obtained which are acceptable to the consumer but which also possess all of the nutritionally important constituents of the grains from which they are derived."

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