Goldberger Joseph dr.

Wash.Star, June 28, 1942

Scientist risked death to give mankind life



DR. JOSEPH GOLDBERGER.

Born 1874 Girált, Sáros megye + 1929, Washington, D.C. 1. S. When G yrs old (1880)

*THERE WERE GIANTS IN THOSE DAYS."

This is the 17th of a series of articles about men and women who worked fought and died that America might live; men and women who made America great by tributing their own greathess country which was founded streamers and the pursuit of happiness as the right of every man. The 18th articles in the series will appear next Sunday.

By Paul De Kruif.

When you believe enough in your own science to be ready to give up your life to convince the world of it—then, with luck, you have a chance to become a giant your country will remember. In 1916, Dr. Joseph Goldberger risked his life for truth. He was a lone-wolf searcher of our United States Public Health Service. He held the scientifically unorthodox belief that pellagra was not contagious. He knew it was a hidden hunger—for vitamins that had not then been discovered.

In his fight to solve the pellagra mystery, Dr. Goldberger's first major obstacle was that he had no laboratory animal to which he could give the sickness. His laboratory was our Southland. He wandered out, in 1914, from the Hygienic Laboratory in Washington to a Georgia madhouse, to Southern asylums and into the hovels of Southern havenots. His experimental animals were a red-rashed, weary, lazy, discouraged, often demented rag-tag-and-bobtail of American humanity.

He was a gentle, wool-gathering dreamy Jew, making his own observations, caring little for the opinion of so-called scientific authority. He was no highpressure salesman of his own science. The scientific world could take it or leave it. His exact observations were, from the first, hooted down by physicians experienced in the pellagrous doom of human beings. Worst of all why get het up about this pellagra, any way? Dr. Goldberger's lowly experimental human subjects would perhaps relieve society of an economic burden if they would quickly up and die!

Fundamental Observation

Such were the obstacles Joseph Goldberger had to try to hurdle to call scientific attention to a hidden vitamin hunger that is now known to sap the vigor, not only of our have-nots in the South, but of Americans in every walk of life.

Here was Dr. Goldberger's first and fundamental observation: The difference between people who rot to demented death from pellagra and people who never get it is that pellagrins are poor. Dr. Goldberger, stalking stoopshouldered, peering, questioning, always gentle, always dreamy, through Southern mill villages, plantations, asylums, found this drastic difference between the well-off and the poor:

The prosperous eat what the poor can't afford to buy.

In an asylum where the red death was killing 6 out of every 100 inmates, he saw that physicians, nurses and orderlies never caught this supposedly contagious pellagra. In that institution he saw that it was not the sick inmates who got the milk and the choice cuts of meat. In squalid mill villages our dreamy doctor prowled. Where the nervous weakness, the gnawing indigestion, sent poor people to demented death, there the staff of life was the three M's—meat, meal and molasses. It was white meat, but not the



white meat of turkeys or chickens. It was sowbelly and fatback devoid of lean.

Then, in two Mississippi orphanages, where the kids were listless and unnaturally well-behaved—because of early pellagra—Dr. Goldberger got permission to feed these little ones daily milk and lean meat, and the children quickly grew mischievous and bright and a pleasure to their teachers, and the pellagra vanished.

But such science was too simple for many a scientific highbrow; and now at the Rankin Prison Farm, Miss., with the permission of the Governor and on the promise that they would be pardoned, Dr. Goldberger gave a band of tough convicts the unquestioned pellagra just by keeping them for a few months on diets of that white fat pork meat, mean and molasses.

The authenticity of this experimental pellagra was vouched for by expert skin doctors, yet even now powerful scientific authorities insisted that pellagra was merely a contagion, like typhoid fever. But could he be right, with all the scientific world against him? Well, he would settle it. There was one way to convince them.

So now, somnambulistic, oblivious to his own wife and children keeping his plans secret from friends, superiors, Joseph Goldberger got ready—for the sole purpose of laying his own gnawing doubts—a dreadful self-experimentation. It was as revolting as it might perchance be deadly—that is, if his scientific opponents happened to be right, and if he himself was wrong. . . .

Dr. Goldberger was famous for his

modesty. But now he was proud. He was forced by his searcher's pride to risk his dark, deep urge to understand, to pit the yet not finally tested hunch held by himself alone against a self-experiment the outcome of which might well be death.

He could plead this excuse for his lonely outlaw science against his family, against the Government, yes, against Joseph Goldberger. He was goaded to it not because his scientific opponents had proved his science to be wrong by proper experiment, but because they tried to kill his truth by ignoring it.

Driven by Hunch

His wild project was the more astounding when one considers his gentleness. No, he growled—no, pellagra is not contagious, infectious. I know it. I'll prove it. So now his hunch drove him to that desperation displayed by Capt. Ahab in his hunt for the white whale, Moby Dick.

Alone in the washroom of a pullman traveling north toward Washington, he made the intestinal discharges of a dead pellagrin up into a pill, with a little flour. Would these give him pellagra? He ate them. Then he injected himself with groundup suspensions of pellagrous ulcers, and with the pellagrous blood of those who had died. So he bet his understanding against his life. Alone. And he did not get sick. And he did not die.

But now consider what next occurred. After he made this solitary rendezvous with truth, he determined that others must similarly risk their lives to bear witness. What if, perchance, he was naturally immune to pellagra?

So now he asked his comrades of the Public Health Service to join him, to demonstrate, maybe, that his own personal survival had been only a fluke, an accident. But what had these 14 colleagues to gain from the risk in which they joined him? It was not their theory. It was not their headache. It was only Dr. Goldberger's.

So, in three successive experiments, these 14 men of the Health Service and his own wife, Mary Farrar Goldberger, made free with their lives. They let Dr. Goldberger try to infect them with the blood of the dying pellagrins. They were bold fools, all of them. But they did not come down with pellagra.

They conquered themselves to give Dr. Goldberger his final satisfaction, the proof of his insight that pellagra was not infectious. So they gave mankind life.

The Government gave them no overtime, no extra pay, not even a pat on the back for this work, which was not in the line of duty. And glory? It is doubtful if one of the readers of this article knows the name of even one of those who helped Dr. Goldberger to find this truth that demolished his scientific enemies for all time, and that has now begun to result in staying mankind's hidden hunger.

Chemical Famine

That was the way Joseph Goldberger, softest-spoken and gentlest of acientific desperados—in the years when the American people cared little for the fate of our hidden hunger havenots—fumbled toward the discovery of America's widespread hidden hunger of our chronic chemical famine. For this, in the past

10 years, has become plain: For every 1,000 poor white men or women who die of pellagra, 30,000 or 40,000 suffer the sickness in a form short of fatal. And for these 30,000 or 40,000 who are obviously pellagrous, there are many more who are nervous, weary, afraid for no reason, suffering vague aches and pains, insomniac, irritable and not living on the possible top step of life that comes from food rich in B vitamins against the hidden hunger.

Before he died—which he did too soon, in 1928, of cancer of the kidney—Joseph Goldberger succeeded in getting his pellagra over into dogs, giving them the pellagramimicking disease called "black tongue." Then, using such dogs, Wisconsin's brilliant vitamin chemist, Conrad Elvehjem, discovered the precise chemical, the lack of which in food caused pellagrous forlorn to drop into demented death.

This was nicotinic acid. And now, by its cheap, simple magic, at Hillman Hospital, Birmingham, Ala., famine-fighting Dr. Tom D. Spies proved that nobody need die of pellagra at all. In the past six years, he has proved that the death rate of people seriously enough pellagrous to have to be hospitalized—formerly 50 out of every 100—can be cut to zero. For six years no pellagrin has died at Hillman Hospital, and many thousands have been cured.

And today, this cheap chemical, nicotinic acid, now called "niacin," together with other B vitamin chemicals such as thiamin and riboflavin, strengthening our country's white bread, are giving promise to abolish our widespread B vitamin hunger, to make us a Nation of far harder workers and tougher fighters, to give us stamina for production, and courage to fight for freedom.