## Pauling's Weapon Against Swine Flu

By David Perlman Science Correspondent

Linus Pauling, a Nobel prizewinning chemist, added swine fluto the long list of diseases he believes can be prevented and even treated by large doses of Vitamin C.

Pauling conceded, however, that there has not been a single, carefully controlled test to support his claim directly.

But at a press conference before a dinner speech to the American Chemical Society here, Pauling insisted the government's \$135 million effort at mass vaccination against swine flu is unnecessary and politically inspired.

Pauling has long and ardently advocated Vitamin C— known chemically as ascorbic acid—as the best preventive against the common cold. And the best cold remedy, too.

While most people take about 100 milligrams of Vitamin C in their daily orange juice, the 75-year-old Pauling doses himself with 10,000 milligrams of ascorbic acid tablets every day—and he never gets a cold, he says.

Discussing the brief and limited outbreak of swine virus influenza among recruits at Ft. Dix, N.J., last February, Pauling said the virus has proved relatively benign and highly unlikely to cause an epidemic. Not a single new case of the disease has been reported since the first cases, he said.

The only recent study of Vitamin C's possible protective effect against influenza that Pauling could cite was a 1972 survey by University of Toronto public health specialists.

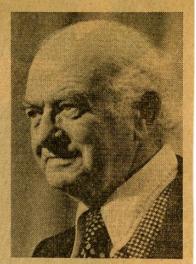
They found a 30 per cent decrease in "winter illness" among people taking large doses of the vitamin compared to a group who did not use Vitamin C.

"Winter illness," Pauling said, would logically have included large numbers of potential influenza cases.

If swine flu does hit the United States this winter, Pauling said, the disease is not likely to be serious, and it can be controlled effectively by more Vitamin C—or by antibiotics if secondary bacterial infections develop.

In the worldwide flu epidemic of 1918-1919, when 20 million people died, it was secondary infection, such as pneumonia, that caused the death toll. But there were no antibiotics then.

Pauling said his own examination of past scientific studies—and current research at his Linus Pauling Institute of Science and Medicine in Menlo Park—has convinced him that large doses of Vitamin C can protect people against hepatitis, tuberculosis, heart disease and cancer, as well as colds and influenza.



LINUS PAULING

Doubts of an epidemic

The vast majority of physicians and scientists disagrees strongly.

Pauling is the author of a bestselling book called, "Vitamin C and the Common Cold" A new revised edition will be published next' month. Its title, Pauling announced, is "Vitamin C, the Common Cold, and the Flu."

## 5 June 1976 Bas york Thous

## On Fighting Swine Flu

To the Editor:

The news article "Researchers Find Large Doses of Vitamin C May Damage Gene Material" (May 20) describes observations by a research team in the Cancer Research Center of the University of British Columbia on the mutagenic action of ascorbic acid, metal ions and oxygen, and quotes one of the investigators as suggesting that people should "avoid massive doses of vitamin C." I have advocated the use of vitamin C." I have advocated the use of vitamin C in amounts of several grams per day to prevent or treat the common cold and other infectious diseases, including influenza, and I think that it may be of importance in relation to the expected epidemic of swine flu that people not be discouraged from making proper use of this valuable substance. The action of ascorbic acid, metal ions and

oxygen on nucleic acids and proteins has been known for several years. It leads to inactivation of viruses and contributes to the control of viral diseases by vitamin C. It has been evident that animals have some mechanism to protect their genetic material against this sort of damage. For example, the mouse shows a low mutation rate, even though it manufactures vitamin C in its own cells at a rate corresponding to an intake of nineteen grams of the vitamin per day for a man. It is likely that human beings have the same protective mechanism, and that there is little danger of harmful effects from ingesting the amounts of vitamin C, several grams per day, that most animals synthesize for themselves. LINUS PAULING

Linus Pauling Institute of Science and Medicine

Menlo Park, Calif., May 21, 1976