

Food Additive Helpful In Treating Viruses

A common food additive may be useful in treating virus-caused diseases ranging from cold sores to rabies, according to Penn State biophysicists.

The team of four researchers has discovered that the additive known as BHT (for butylated hydroxytoluene) can inactivate or kill certain viruses

on contact.

The researchers are Dr. Wallace Snipes, professor of biophysics; Dr. Stanley Person, professor of biophysics; Dr. Alec Keith, associate professor of biophysics; and James Cupp, a doctoral candidate in biophysics.

The study is detailed in the current issue (April 4) of the journal, *Science*, in a paper titled *Butylated Hydroxytoluene Inactivates Lipid-Containing Viruses*.

They write that in their tests at the Penn State laboratories, viruses with a fatty outer membrane called a lipid coat, such as herpes simplex, the cause of cold

sores, were readily inactivated by BHT.

Viruses without lipid coats, such as polio virus, were unaffected.

The scientists reason that BHT inactivates the virus by disturbing the fatty membrane and believe that other lipid-coated viruses, such as those that cause flu, rabies, and herpes strain B venereal disease, for example, may also be sensitive to the additive.

In a recent interview Dr. Keith pointed out that the levels of BHT needed to kill the viruses are not much higher than those already found in human body fat. Americans, for example,

have about one tenth of the amount needed to inactivate herpes simplex. Britons have less than half that much.

The BHT is accumulated from the diet. It is widely used to maintain food freshness and prevent spoilage in breads, cereals, cooking oils, and canned goods.

However, Dr. Keith cautions that the early Penn State results tell nothing about how BHT acquired from food functions in the human body.

It would be foolish, he says, to try to cure cold sores, say, by eating extra quantities of BHT-containing bread.

If further tests prove the

effectiveness of the additive as a drug, BHT will probably be used first in topical applications, he says. In the case of cold sores, BHT mixed with petroleum jelly could probably be applied to the canker.

Keith noted that BHT treatment for herpes strain B venereal disease looks especially promising since it too could be treated topically.

PSU Ag Alumni To Meet May 10

The 8th annual Alumni Association meeting for graduates of the College of Agriculture at The Pennsylvania State University will be held on the campus on Saturday, May 10. Alumni may register from 8 a.m. until noon on Room 117, Borland Laboratory, the dairy science building which will be headquarters for the day's events.

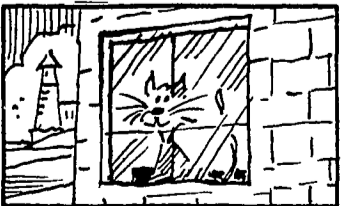
The annual business meeting is scheduled for 9 a.m. in Room 117, Borland Laboratory, with Ralph M. Horst, of Lebanon, alumni president, in charge. Newly elected directors of the Association will be announced.

"Food Science--the Science for Survival," will be the morning theme. The purpose will be to acquaint returning alumni with the Penn State food science program, a major that involves the Departments of Animal Science, Dairy Science, Horticulture, and Poultry Science.

Dr. Donald V. Josephson, class of 1936, who is chairman of the Division of Food Science and Industry, will head up the program. A 20-minute film on food science will be shown, followed by discussions with faculty members on various phases of food science at Penn State.

Display cases bought with alumni contributions to exhibit antique farm tools in the lobby of the Agricultural Administration Building will be dedicated as part of the morning's activities. A picnic lunch in Hort Woods is scheduled for noon. Afternoon activities will include a tour of the Mushroom Test - Demonstration Facility, and the annual Blue-White football game slated for 2 p.m. in Beaver Stadium.

The alumni banquet will be held at 7 p.m. in dining rooms A and B of the Hetzel Union Bldg. College of Agriculture Alumni Association awards to outstanding Penn State students will be presented. Dr. Murry C. McJunkin, class of 1940, who is a 1975 Penn State Alumni Fellow, will be the featured speaker. He is retired manager of market development, U.S. Steel Corp.



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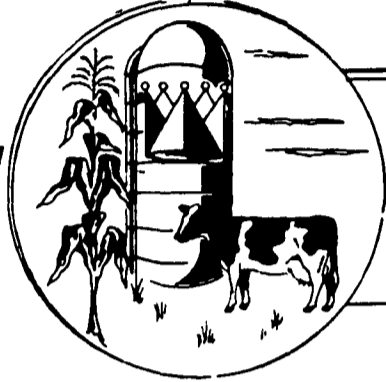
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