

milk cannot have more than .5 ppb of aflatoxin. The Dutch government, however specifies .05 ppb, while the Swiss specify .01 ppb. As Hamilton put it, "This is the most potent carcinogen known to humans, and nobody knows what safety is."

How can the aflatoxin level be limited? "We can do it," Hamilton said, "but it costs money, and as long as the agricultural segment is expected to subsidize other segments of the society, it won't happen." Ammoniation of stored grain destroys aflatoxin, but it costs 20 cents to 80 cents per bushel. Gamma ray irradiation would also work, he said, but there is no U.S. infrastructure in place to use irradiation to purify food stocks, so this method would require large start-up costs.

What is particularly ironic in the case of aflatoxin is that the environmentalists and the Environmental Protection Agency ignore the potential risk from aflatoxin because it is "natural." However, man's intake of natural toxins and natural pesticides is perhaps 10,000 times higher than the dietary intake of man-made pesticides, according to Dr. Bruce Ames, chairman of the biochemistry department at the University of California. Yet, Ames notes: "Many, if not most, of these plant toxins may be 'new' to humans in the sense that the human diet has changed drastically with historic times. By comparison, our knowledge of the toxicological effects of new man-made pesticides is extensive, and general exposure is exceedingly low."

A study done by the state of California in 1982 showed that aflatoxin has a potency of 200 on a scale comparing cancer causing substances for humans, while the chemical EDB, recently banned by the Environmental Protection Agency as a potential carcinogen, was rated at a level of 0.8.

More research needed

There are a few research programs ongoing to study the effects of aflatoxin on animals, but, according to Hamilton, there should be more interest in solving the problem and finding out how the carcinogen works. Agricultural research, Hamilton noted, is just one of the casualties of the U.S. Department of Agriculture's attempt to shut down American farming.

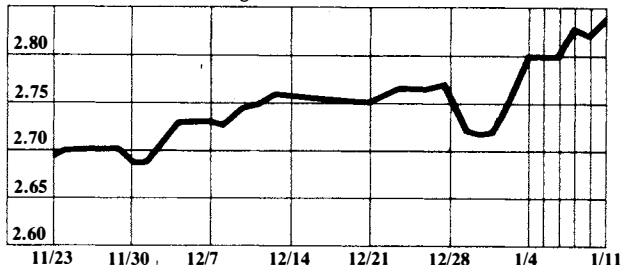
So far, the aflatoxin research has had some unexpected results, such as the finding that low amounts of the material have drastic affects on the immune system of various animals. But there are other areas left untouched. A study of how aflatoxin affects the immune system in chickens, for example, could be a model for a study of AIDS (acquired immune deficiency syndrome) in humans, but there is no work going on in this area.

In the larger sense, it is clear that a study of how aflatoxin in grains increases as austerity prevents the American farm sector from using man-made improvements in crop cultivation would provide specific data on just how quickly depression conditions move through the food chain, lower the health of the entire population, and increase the risk of death from certain types of cancer.

Currency Rates

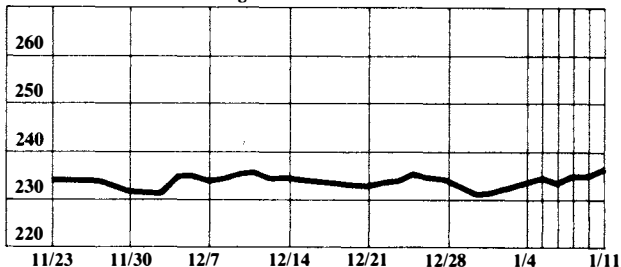
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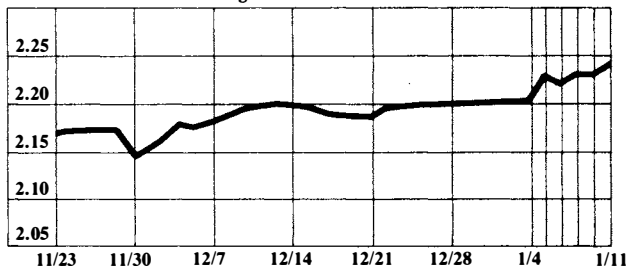
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The British pound in dollars

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