and HT2 were found in the blood and urine drawn from victims 24 hours after exposure. The concentrations were substantial and the identification unequivocal. Victims such as these are hard to come by, and the data obtained force one to a logical conclusion that these people were exposed to large doses of toxins impossible to obtain from natural contamination. The T2 residue obtained from victims exposed 18 days earlier is more difficult to explain from our present-day knowledge of T2 metabolism, although the analytical data are sound. We know that ochratoxin A has approximately a 3-day half-life in the blood of swine and that zearalenone has a half-life of 26 hours in bovine serum (data from our laboratory); perhaps it is not surprising that trace amounts of T2 and HT2 were found in humans 18 days after exposure. We do not know what residue to expect in a human system exposed to large doses of toxin that could realistically overwhelm the detoxification system of the liver. Experiments conducted in our laboratory showed that a cow intubated with a single dose of T2 toxin (180 milligrams) contained 8.4 parts per billion (ppb) T2 4 hours after exposure and 5.9, 1.1, and 0.5 ppb after 8, 16, and 20 hours, respectively. Moreover, metabolic studies of tritiated T2 toxin in a cow showed radioactivity in the plasma equivalent to 10.2 ppb 3 days after single-dose exposure. These results are in contradistinction to those reported by W. Buck and S. Swanson (*1*), where intravenous administration was used and no T2 could be found a few hours after treatment (half-life of 10 minutes). I am not certain that intravenous administration is meaningful in half-life calculations of T2 in humans where exposure is affected by inhalation and absorption through the skin and the contact time of toxin is not known. Moreover, our findings have shown that other metabolites, such as TC1, neosolaniol, HT2, TC3, 4-deacetylneosolaniol, TC6, and TC8 were found in bovine plasma 20 hours after exposure at concentrations of 3.8, 0.6, 0.3, 2.6, 0.8, 7.5, and 9.1 ppb, respectively. Collectively this represents a total of 25.4 ppb of trichothecene metabolites 20 hours after exposure. We can detect less than 1 ppb of T2 and HT2 toxins and feel that the low concentrations found are reasonable, particularly where the data on amount and duration of exposure of victims are lacking and the metabolism in humans is unknown. It would be unscientific to ignore the residue found by empirical means on the grounds of theoretical considerations.

One last comment on the cost of T2 production for large-scale use: If one were to prepare pure crystals of T2 or diacetoxyscirpenol, then the cost would be prohibitive. However, the preparations used are crude and contain a mixture of fungal metabolites. Crude culture extracts with a minimum of preparation would be cost-efficient.

C. J. MIROCHA
Department of Plant Pathology,
University of Minnesota,
St. Paul 55108

References

1. W. Buck and S. Swanson, paper presented at the meeting of NC129, North-Central Regional Mycotoxin Committee, U.S. Department of Agriculture, Denver, Colo., March 1982.

Correct Attributions

I would like to make two small corrections to the careful account by Jean L. Marx (Research News, 9 July, p. 141) of the recent work of Behan and myself on the associations of left-handedness.

The article attributes to me and Marian Diamond of Berkeley the discovery of sex-related anatomic differences in the brains of rats. In fact, the credit for this discovery is due only to Diamond and her co-workers. Following up her work, Albert Galaburda of my department confirmed by a different group of measurements the presence of asymmetry in the rat brain.

In addition, the article attributes in part to me the credit for discovering the abnormalities in the brain of a childhood dyslexic. This finding was the work of Galaburda and Thomas Kemper.

NORMAN GESCHWIND
Neurological Unit,
Beth Israel Hospital,
Harvard University Medical
School, 330 Brookline Avenue,
Boston, Massachusetts 02215

Related Incidents?

It appears that the recent detention and expulsion of Lisa Wichser from the People's Republic of China was probably in retaliation for the initial diplomatic incident, when the luggage belonging to ten Chinese nationals, five of whom were diplomats, was searched in New York on 6 May (News and Comment, 11 June, p. 1204). It is a common occurence for countries to respond to one diplomatic offense with a similar incident; in this case there are several similarities between the two incidents. Both involved students on exchange programs and questions concerning information flow. Even the statements made by people involved in the incident are similar. For instance, the statement by Chinese official Li Jia Zhao, "As far as we know, everything was public information," sounds similar to Wichser's statement, "They weren't state secrets." In each case, these people were refering to documents being used and transported by the exchange students.

While the initial incident, the U.S. search of diplomatic luggage, was clearly in violation of international convention, the second incident, the Chinese search and detention, was legal but more serious because an expulsion resulted from it. The State Department should be aware that the latter incident may be intended to put the United States on notice that the Chinese will not stand for petty harassment, in which the Reagan Administration has been involved, of the nationals of socialist and communist nations.

Many scholars feel that the United States has as much to gain from exchanges as the People's Republic of China and the Soviet Union; while we need social science information predominantly, they need technical information. If we limit the access of unclassified technical information, these countries may increase restrictions on their social science and technical information. We cannot expect to get something for nothing.

It is interesting that the U.S. press generally did not mention the Chinese luggage incident with any degree of import (in some newspapers, the incident was not reported at all), while Wichser's expulsion was widely reported as a major incident. Moreover, the press usually gave the main reason for the incident as Wichser's engagement to a Chinese national. To my knowledge, the press has not attempted to connect the two incidents, even though they appear linked; nor has the press noted that the restrictions the People's Republic of China places on information flow to foreign nations are not altogether different from the restrictions the Reagan Administration is imposing.

KYAW THA PAW U
Department of Agronomy,
Purdue University,
West Lafayette, Indiana 47907

Erratum: The credit line for the cover photo of the 30 July issue should have included, in addition to Raymond T. Bartus, Reginald L. Dean and Marc S. Abel at the Lederle Laboratories, American Cyanamid Company, Pearl River, New York 10965.

Erratum: The sentence beginning on line 6 of the cover legend for the issue of 2 July should have read, "The stomach can be seen filled with ingested algae, and to the *right* of the stomach. . . ."