movement, postural instability and progressively involuntary writhing movements, paralysis and an inability to talk or swallow." Most cases of Parkinson’s are believed to result from chemical exposure or an interaction between genetic susceptibility and environmental factors. Only 10% are truly genetic.

Several studies indicate a link between pesticide exposure and Parkinson’s. Researchers have found that people who live in farming areas and have been exposed to pesticides (directly and/or through well water) are more likely to get Parkinson’s. In 2000, researchers at Stanford University interviewed 1038 people about their lifestyle habits and exposure to insecticides, herbicides, or fungicides. Nearly half of the group (496 people) had Parkinson’s. Their results showed that “individuals who were exposed to pesticides in the home or garden were 70% more likely to develop Parkinson’s than those who were not exposed,” according to the PANNA article. Also, the brains of those who die of Parkinson’s have higher levels of organochlorine pesticides than those who do not have the disease.

PANNA. Parkinson’s Disease Possibly Linked to Pesticide Exposure. Pesticide Action Network Updates Service 2001 September 28; www.panna.org

Pig Feed for Bipolar Disorder

Crime Times (Vol. 8, No. 1, 2002) contains an article about a vitamin-mineral supplement that is being tested on people with bipolar disorder ( manic depression). A preliminary study by nutrition researcher Bonnie Kaplan and colleagues at the University of Lethbridge in Canada found symptom improvement in 11 adult patients (age 19 to 46 years) during a six-month trial and a more than 50% decrease in the need for psychotropic drugs (Journal of Clinical Psychiatry, Vol. 62, No. 12, December 2001, 936-41). The only side effect was mild, temporary nausea. Charles Popper, a Harvard professor, replicated their experiment with 22 bipolar patients. Nineteen responded to the supplement. Of the 15 patients who were on medication, 11 were able to discontinue the drugs.

Engineer Anthony Stephan and his friend David Hardy developed the supplement used in these studies. Mr. Stephan’s wife and two children suffered from bipolar disorder. His wife committed suicide. When Mr. Stephan described the child’s symptoms and violent behavior to Mr. Hardy, his friend said that their behavior sounded like aggression found in pigs that was treated with a supplemented livestock feed. Using the pig feed as a model, the two men combined various vitamins and minerals and gave them to Mr. Stephan’s children. Within a few weeks, the daughter was able to discontinue her medication, and the son’s behavior was becoming normal. The men contacted the University of Lethbridge about their results, and officials asked Bonnie Kaplan to evaluate the supplement. Encouraged by the preliminary trial, the researchers are now conducting a randomized, placebo-controlled study with adults and several open-label trials with children.

Pig feed for depression? Crime Times 2002; Vol. 8, No. 1: p. 3

Predicting Alzheimer’s

An article in Science News (May 18, 1996) by Kathleen Fackelmann says that researchers are trying to predict the development of Alzheimer’s with two different methods: writing samples and brain scans. The first method is based upon a person’s use of language. David A. Snowdon and colleagues at the University of Kentucky (Lexington, Kentucky) studied the autobiographies, handwritten at an average age of 22 and kept in convent archives, of 93 nuns. The researchers analyzed the material for idea density and grammatical complexity. In addition, the nuns, who at the time of the study were 75 years or older, were given tests to measure cognitive functions including memory, concentration, language ability. Nuns who did poorly on the cognitive tests were more likely to have authored autobiographies with low idea density. The researchers ruled out education as a factor by examining a subgroup of highly educated nuns. Again, low idea density in the writing samples belonged to the nuns who later developed cognitive problems and dementia. The researchers also got autopsy results of 14 sisters who died during the years of the study. Alzheimer’s was confirmed in 5 of the 14. The autobiographies of those 5 showed low idea density while the autobiographies of the other 9 (whose brains showed no sign of Alzheimer’s) did not.

In the second method, Eric M. Reiman of the Good Samaritan Regional Medical Center (Phoenix, Arizona) and colleagues investigated the use of genetic tests and the use of PET brain scans to predict the development of Alzheimer’s. From a pool of 235 volunteers, age 50-65, the researchers found 11 who had inherited a gene called apolipoprotein E-IV from both parents: “Such people appear to face a 55% chance of getting Alzheimer’s by age 80.” Cognitive tests were given to these 11 subjects and to 22 controls who did not have the apo E-IV gene. All of the subjects performed normally on the tests. When the researchers used PET to examine the brain’s use of sugar glucose, however, the 11 subjects with apo E-IV differed from the controls. Their PET scans showed an overall reduction in activity in the same regions as Alzheimer’s patients.

Writer Kathy Fackelmann notes that “(in 1995) a team led by Gary W. Small of the University of California, Los Angeles, School of Medicine also found PET abnormalities in healthy people who had just one copy of the apo E-IV gene.”

Kathy Fackelmann says that the idea of trying to predict Alzheimer’s raises some important questions: “If researchers end up devising a test that reliably foretells a future of dementia, what then? Who should have access to information that may lead to a loss of health insurance or a job? Should doctors offer a predictive test for a disease that has no cure?”


Immunological Treatment for Alzheimer’s

In an interview conducted by Sam Biser, published in 1993, H. Hugh Fudenberg, MD, stated that biologically-produced ‘transfer factor’ could reverse the decline found in Alzheimer’s patients whose disease is immunological. Dr. Fudenberg says: “There are at least four types of Alzheimer’s. Two of the types have an immunological basis for the disease, and we can help these. They account for about 50% of the people with Alzheimer’s.” Formerly the chairman of the Medical University of South Carolina (Charleston) Department of Basic and Clinical Immunology, Dr. Fudenberg now works with the Neuromonomy Therapeutics Research Foundation in Spartanburg, South Carolina (www.nitrf.org).

Dr. Fudenberg says that the immune system regulates the brain and nervous system via the immune cells’ effect on the hypothalamus. The hypothalamus manufactures hormones called corticotropic-releasing factors, which stimulate the pituitary to secrete other hormones that affect the thyroid. The direct connection between the immune system and the brain is further evidenced by certain neurotransmitter receptors found in brain cells and also in lymphocytes and monocytes. (Neurotransmitters are “chemicals that transport signals from one part of the nervous system to another.”) He told Sam Biser: “If the immune system is weak, the brain cells become atrophied. These brain cells are not dead; they are small and not functioning...when the immune cells are not working, the brain cells are not working either.”