

UNPROVEN “ALLERGIES”: AN EPIDEMIC OF NONSENSE

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During recent years, several hundred physicians have promoted concepts of allergy and immune dysfunction not recognized by the scientific community. Instead of testing these concepts with scientifically acceptable protocols, they have been marketing them to the public through books, magazine articles, radio and television talk shows and other channels. They have also been supporting lawsuits and worker's compensation claims by individuals claiming to have "multiple chemical sensitivity" caused by exposure to environmental chemicals. The health food industry has joined the fray by marketing supplement concoctions for treating the supposed conditions.

"Clinical Ecology"

"Clinical ecology," which is not a recognized medical specialty, is based on a theory that multiple symptoms are triggered by hypersensitivity to tiny amounts of common foods and chemicals. Advocates of this belief describe themselves as "ecologically oriented" and consider their patients to be suffering from "environmental or ecological illness," "cerebral allergy," "total allergy syndrome" "20th century disease," or "multiple chemical sensitivity (MCS)," which can mimic almost any other illness.

The signs and symptoms of this condition are said to include depression, irritability, mood swings, inability to concentrate or think clearly, poor memory, fatigue, drowsiness, diarrhea, constipation, sneezing, running or stuffy nose, wheezing, itching eyes and nose, skin rashes, headache, muscle and joint pain, urinary frequency, pounding heart, muscle incoordination, swelling of various parts of the body and even schizophrenia. Proponents state that virtually any part of the body can have "elusive symptoms for which no organic cause can be found."

Clinical ecologists speculate that: (1) although one substance may not have an effect, low doses of different substances can add to or multiply each other's effects; (2) hypersensitivity develops when the total load of physical and psychologic stresses exceeds what a person can tolerate; (3) patients often crave and become addicted to foods that make them ill; (4) changes in the degree of exposure can affect the degree of sensitivity to offending substances; and (5) hypersensitivities may be related to "immune system dysregulation" or "immunotoxicity" that can be difficult to diagnose and treat. Some proponents inform patients that they have "an AIDS-like illness."

Clinical ecologists suggest that the immune system is like a barrel that continually fills with chemicals until it overflows, signaling the presence of disease. However, some also say that "immune system dysregulation" can be triggered by a single serious episode of infection, stress or chemical exposure. Potential stressors include practically everything that modern humans encounter, such as urban air, diesel exhaust, tobacco smoke, fresh paint or tar, organic solvents and pesticides, certain plastics, newsprint, perfumes and colognes, medications, gas used for cooking and heating, building materials, permanent press and synthetic fabrics, household cleaners, rubbing alcohol, felt-tip pens, cedar closets, tap water and electromagnetic forces.

To diagnose "ecologically related" disease, practitioners take a history that emphasizes dietary habits and exposure to environmental chemicals they consider harmful. They perform a physical examination and certain standard laboratory tests, mainly to rule out other causes of disease. Standard allergy test results are usually normal.

Practitioners also use various nonstandard test, mainly “provocation and neutralization.” In this test, the patient reports symptoms that develop within ten minutes after various concentrations of suspected substances are administered under the tongue or injected into the skin. If any symptoms occur, the test is considered positive and lower concentrations are given until a dose is found that “neutralizes” the symptoms. Elimination and rotation diets are used with the hope of identifying foods that cause problems.

In severe cases, patients may spend several weeks in an environmental control unit designed to remove them from exposure to airborne pollutants and synthetic substances that might cause adverse reactions. After fasting for several days, the patients are given “organically grown” foods and gradually exposed to environmental substances to see which ones cause symptoms to recur.

Treatment requires avoidance of suspected substances and involves lifestyle changes that can range from minor to extensive. Generally, patients are instructed to modify their diet and to avoid such substances as scented shampoos, after-shave products, deodorants, cigarette smoke, automobile exhaust fumes and clothing, furniture and carpets that contain synthetic fibers. Extreme restrictions can involve staying at home for months or avoiding physical contact with family members. “Ecologically ill” patients may think of themselves as immunological cripples in a hostile world of dangerous foods and chemicals. They perceive the medical community as uncaring. In many cases, their life becomes centered around their illness.

Several franchised laboratories associated with chemical decontamination programs claim to detect “toxins” in the blood with an accuracy in parts per billion. Vitamin therapy costing thousands of dollars is then recommended for any value above the “normal” level of zero. This approach is not part of “traditional” clinical ecology, but some of its practitioners are involved in it.

A few practitioners who consider themselves clinical ecologists use computerized galvanometers to diagnose “energy imbalances” and select homeopathic remedies or other products to correct these imbalances. The FDA considers such devices “a significant risk” to the public and has begun efforts to stop their use.

Critical Scientific Reports

Five prominent scientific panels have concluded that clinical ecology is speculative and unproven:

- The California Medical Association Scientific Board Task Force on Clinical Ecology conducted an extensive literature review and held a hearing at which proponents testified. The task force stated that “clinical ecology does not constitute a valid medical discipline” and should be considered “experimental” only when its practitioners begin to use scientifically sound experimental methods. The task force also expressed concern that unproven diagnostic tests can lead to misdiagnosis that results in patients becoming psychologically dependent, believing themselves to be seriously and chronically impaired.¹
- The Ad Hoc Committee on Environmental Hypersensitivity Disorders established by the Minister

of Health of Ontario, Canada, received submissions, heard testimony from a large number of professionals and laypersons and observed practitioners at work. They then issued a 500-page report describing the concepts of clinical ecology and the evidence, if any, supporting them.² An expert panel then reviewed this report and concluded that “scientific support for the mechanisms that have been proposed to underlay the wide variety of dysfunctions are at best hypothetical. Moreover the majority of techniques for evaluating the patients and the treatments espoused are unproven.”³

- The American Academy of Allergy and Immunology, which is the nation’s largest professional organization of allergists, published a position statement based on an extensive literature review and comments by its members. The statement said, “The idea that the environment is responsible for a multitude of human health problems is most appealing. However, to present such ideas as facts, conclusions or even likely mechanisms without adequate support is poor medical practice” and that “advocates of this dogma should provide adequate studies... which meet the usually accepted standards for scientific investigation.”^{4,5}

- The American College of Physicians has issued a position paper concluding that “there is no body of evidence that clinical ecology treatment measures are effective.”⁶ An accompanying editorial in the same journal notes that its promotion has many characteristics of a cult and that its treatment approach should not be considered harmless.⁷

- The American Medical Association Council on Scientific Affairs concluded in 1991 that “until... accurate, reproducible, and well-controlled studies are available... multiple chemical sensitivity should not be considered a recognized clinical syndrome. Based on reports in the scientific peer-reviewed scientific literature... (1) there are no well-controlled studies establishing a clear mechanism or cause for [MCS]; and (2) there are no well-controlled studies providing confirmation of the efficacy of the diagnostic and therapeutic modalities relied on by those who practice clinical ecology.”⁸

In 1991, a National Research Council subcommittee concluded that hypersensitivity has an immunologic basis, but “multiple chemical sensitivity (MCS) syndrome” does not.⁹ (In other words, although some people are sensitive to small doses of one or a few specific chemicals, the idea that people become generally hypersensitive to chemicals has no scientific foundation.) The subcommittee also noted that the controversy surrounding the diagnosis of MCS cannot be resolved until MCS is clearly (and measurably) defined and then explored with well-designed studies. Following a workshop at which proponents began discussing possible research protocols, the National Research Council (NRC) summarized the deliberations and warned again that meaningful research on “multiple chemical sensitivity” cannot be conducted until clear criteria for such a diagnosis can be defined.¹⁰ Nonetheless, “MCS” proponents tout NRC’s involvement as evidence that their beliefs and practices are legitimate.

Case Studies

Critics of clinical ecology have suggested that “environmental illness” is psychosomatic even though its symptoms don’t fit clearly into any disease category. Patients in this situation are often relieved to get a “physical” diagnosis which encourages them to play an active role in their care. However, several studies suggest that many of them give up much more than they get.

- Abba I. Terr, M.D., an allergist affiliated with Stanford University Medical Center, has reported on fifty patients who had been treated by one or more of sixteen clinical ecologists for an average of two years. He had evaluated most of these patients because they had made a worker’s compensation claim for industrial illness. Although all had been diagnosed as “environmentally ill,” Dr. Terr could find no unifying pattern of symptoms, physical findings or laboratory abnormalities. Eight of the patients had not gotten their symptoms until after they had consulted the clinical ecologist because they had been worried about chemical exposure. Eleven had had symptoms caused by pre-existing problems unrelated to environmental factors, and 31 had multiple symptoms. Their various treatments included dietary alterations (74 percent), food or chemical extracts (62 percent), an anti-fungal drug (24 percent) and oxygen given with a portable apparatus (14 percent). Fourteen of the patients had been advised to move to a rural area, and a few were given vitamin and mineral supplements, gamma globulin, interferon, female hormones and/or oral urine. Despite treatment, twenty-six patients reported no lessening of symptoms, twenty-two were clearly worse, and only two improved.¹¹

In 1989 Dr. Terr published similar observations on ninety patients, including forty in the previous report. Although one or more of over fifty sources of chemicals at their workplace had been blamed for the patients’ problems, he noted that the testing process did not usually include extracts of the workplace materials that were presumably responsible. He also noted that thirty-two of the ninety patients had been diagnosed as suffering from “candidiasis hypersensitivity”—a fad diagnosis considered “speculative and unproven” by the American Academy of Allergy and Immunology.¹²

Since provocation-neutralization tests had played a major role in the misdiagnosis of most of the patients he examined, Dr. Terr pointed out that scientific studies have shown that these tests are unreliable. He stated that although exposure to chemicals can cause disease, it is unlikely that the diagnostic and treatment methods of clinical ecology are effective. He also believes that its methods and theories appear to cause unnecessary fears and lifestyle restrictions.

- Carroll M. Brodsky, M.D., Ph.D., professor of psychiatry at the University of California (San Francisco) School of Medicine, made similar observations. After studying eight people who had filed claims for injury primarily by airborne substances following diagnosis by clinical ecologists, he concluded that they became “adherents of physicians who believed that symptoms attributed by orthodox physicians to psychiatric causes are in fact due to common substances in air, food and water.” He also stated that clinical ecologists “neither promise nor give hope of eliminating the offending condition, and the patients do not seem to expect it... [They] seem content with their condition and

with the reassurance that their symptoms have a physical cause... Yet we must also recognize that these patients have had symptoms for many years, and whether seen as neurasthenic, hypochondriacal, or phobic, they are among the most resistant and difficult to treat... These patients search for healers who will provide them with an explanation of their experiences and symptoms that makes sense to them and fulfills a number of psychological needs.”¹³

- Donna E. Stewart, M.D., associate professor of psychiatry and of obstetrics and gynecology at the University of Toronto assessed eighteen “20th-century disease” patients referred to the university’s psychiatric consultation service. She concluded that “virtually all had a long history of visits to physicians, and their symptoms were characteristic of several well known psychiatric disorders... It is important that patients with a wide range of diagnosable and treatable psychiatric conditions not receive a misdiagnosis of 20th-century disease and thereby embark on a prolonged, socially isolating, expensive and often harmful course of ecologic treatment that reinforces their invalidism.”¹⁴

- John C. Selner, M.D., and Herman Staudenmayer, Ph.D., operate an environmental unit in Denver, CO. In a lengthy report, which is probably the best scientific analysis of the subject ever published, they trace the origins of clinical ecology and illuminate the flaws in its theories and practices. They note that: (1) people do exist who are very sensitive to various micro-organisms, noxious chemicals and common foods; (2) the key question is whether multi-system disease can be caused by generalized allergy to environmental substances; (3) when a physician is confronted by a patient claiming to be “allergic to everything,” the diagnosis can usually be traced to the influence of a proponent of clinical ecology; (4) there is no scientific evidence that an immunologic basis exists for such a symptom pattern; (5) clinical ecologists assume that if even a trace of any chemical is found in the patient’s environment, that chemical can be held responsible for any symptom; (6) clinical ecologists appear to lack the motivation or intellectual capacity to test their theories scientifically; (7) clinical ecologists offer a philosophy of certainty, often reassuring patients during an initial phone contact that their diagnosis is obviously ecologic disease; (8) patients with genuine allergies to noxious chemicals do not have multi-system complaints without associated physical or laboratory findings; (9) many patients with symptoms of “environmental illness” find “healers” who tell them they are “universal reactors” to environmental substances; (10) this explanation of their experience and symptoms makes sense to them and enables them to avoid facing their real problem — which is psychiatric in nature; (11) using well designed double-blind tests with more than a hundred patients, the authors were able to demonstrate that most people said to be “universal reactors” develop multiple symptoms in response to the testing process without being allergic to any of the individual substances administered; and (12) once patients understand that this can happen, psychotherapy may cure them. Drs. Selner and Staudenmayer also note that “Ecologists claim a unique identity with victims of the environment by declaring themselves, or members of their families, similarly affected... This is a powerful bonding tool which snares patients into a... cult interdependence in which facts are irrelevant.”¹⁵

- Researchers at the University of Iowa College of Medicine have reported that the prevalence of major psychiatric disorders among twenty-six “environmental illness” patients was more than twice as high as that of a control group.¹⁶

- Researchers at the University of California have demonstrated that provocation and neutralization — the principal diagnostic tests used by “clinical ecologists” — are not valid. The determination was made with a double-blind study of eighteen patients, each of whom received three injections of suspected food extracts and nine of normal saline (dilute salt water) over a three-hour period. The experimental protocol was developed in consultation with proponents and critics who agreed that it was a fair and appropriate test. Proponent organizations also provided financial support.

The tests were carried out in the offices of seven proponents who had been treating the patients. In unblinded tests, these patients had consistently reported symptoms when exposed to food extracts and no symptoms when given saline injections. But during the experiment, the patients reported as many symptoms following salt water injections as they did after food extract injections, indicating that their symptoms were nothing more than placebo reactions. The symptoms included itching of the nose, watery or burning eyes, plugged ears, a feeling of fullness in the ears, ringing ears, dry mouth, scratchy throat, an odd taste in the mouth, tiredness, headache, nausea, dizziness, abdominal discomfort, tingling of the face or scalp, tightness or pressure in the head, disorientation, difficulty breathing, depression, chills, coughing, nervousness, aching legs and intestinal gas or rumbling. Clinical ecologists also claim that “neutralizing” doses of offending allergens can relieve the patient’s symptoms. However, the seven patients who were treated during the experiment had equivalent responses to extracts and saline.¹⁷

- In 1989, a reporter from the syndicated television program *Inside Edition* visited the Dallas clinic of William J. Rea, M.D., past-president of the American Academy of Environmental Medicine (formerly called the Society for Clinical Ecology). The reporter truthfully told Dr. Rea that he had been feeling more tired than usual, that he was having headaches that could be relieved by aspirin, that his eyes had been getting red more often than usual and that his shoulder still hurt from an accident several months ago. Dr. Rea said that all the symptoms could be due to allergies and ordered a lengthy series of skin tests.

Before going to Rea’s facility, the reporter had been checked by Raymond G. Slavin, M.D., past president of the American Academy of Allergy and Immunology, who had found no evidence of allergy. After the reporter returned from his visit to Dr. Rea, Dr. Slavin said that Rea’s testing was a waste of money because the reporter’s story did not provide a legitimate basis to suspect that his symptoms were due to allergies. Dr. Slavin also said that the skin reactions produced by the testing were caused by irritation from the injected chemicals rather than by allergies. *Inside Edition* reported that treatment at Rea’s facility costs thousands of dollars and that he refers many of his patients to a trailer court near Dallas where “environmentally safe” cottages and trailers can be rented for \$500 per week. Rea also has operated an inpatient unit at a hospital in Dallas. Rea’s patient manual — about 75 pages long — contains detailed instructions about food choice and avoiding environmental

chemicals.¹⁸ Rae's recent book, *Chemical Sensitivity: Principles and Mechanisms*, devotes more than 100 pages to "nonimmune mechanisms" of MCS.¹⁹

Political Activities

Rejection by the scientific community has not dampened the enthusiasm of clinical ecologists, about four hundred of whom belong to the American Academy of Environmental Medicine.²⁰ This group, which holds meetings and publishes a quarterly journal, is composed mainly of medical and osteopathic physicians. A few years ago the journal announced that the paper on which it is printed had been changed because several readers had complained that the old paper had made them ill. In the same issue, the editor complained that he was not receiving enough acceptable manuscripts to maintain a four-times-a-year schedule. Despite their questionable content, courses sponsored by the Academy are accepted for continuing education credits by the American Medical Association and the American Academy of Family Physicians.

Clinical ecologists also play a significant role in the American Academy of Otolaryngic Allergy (AAOA), which was founded in 1941 by Theron Randolph, M.D., and others who espoused diagnostic and treatment procedures that mainstream allergists regarded as invalid. AAOA has about 2,000 members, most of whom are board-certified otolaryngologists. The percentage who espouse the practices of clinical ecology is unknown, but leading clinical ecologists teach some AAOA seminars. AAOA has endorsed the use of provocation and neutralization testing.²¹

The Human Ecology Action League (HEAL), formed in 1976, is composed mainly of laypersons and has chapters and support groups in about 100 cities. It distributes physician referral lists and publishes *The Human Ecologist*, a quarterly magazine of news and advice for patients and their families. One area of great concern to proponents is whether insurance companies will pay for their treatment, which can be quite expensive. Advice on how to press for such payment is available from HEAL. In eighteen cases reported to the Canadian committee, patients bore an average annual cost of \$4,463, with a range from \$400 to \$12,378. Insurance companies or government programs did not cover most of these costs.

The National Center for Environmental Health Strategies (NCEHS), of Voorhees, NJ, is a membership organization found in 1986 that now has more than 2,000 members. NCEHS operates a clearinghouse for information on MCS and publishes a newsletter called *The Delicate Balance*. Its founder and president, Marie Lamielle, says that she started the group following an exposure to toxic chemicals after which she "found that no public agency or private organization could answer my questions or advocate for me." In October 1992, she announced that Congress had appropriated \$250,000 to develop MCS research protocols and an MCS patient registry that NCEHS will maintain.

During 1992, the U.S. Department of Housing and Urban Development (HUD) concluded that multiple chemical sensitivity and environmental illness are handicaps within the meaning of the federal Fair Housing Act. HUD memoranda have stated that individuals so handicapped are entitled to "reasonable accommodations" to be determined on a case-by-case basis. NCEHS is lobbying, "pursuant to the Americans with Disabilities Act," to persuade employers and government agencies to adopt policies that "accommodate employees and members of the public disabled by chemical

barriers.” Its lengthy list of recommendations includes: (1) better ventilation systems; (2) no use of air fresheners; (3) no indoor use of pesticides except in emergencies; (4) no use of synthetic lawn chemicals near the workplace; (5) no smoking in or near the workplace; (6) purchase of the “least toxic/allergenic” building materials, office furnishings, equipment, and supplies; and (7) employee prenotification for “construction and remodeling activities and toxic cleaning activities such as the use of paints, adhesives, and solvents; carpet shampoos and floor waxes.”

Caroline Richmond, a medical historian at London University who became concerned about unfounded attacks on food additives, wrote a spoof manifesto for the Dye Research Allergies Bureau (DRAB), a spin-off of a larger group which she called the Food Additives Research Team (FART). According to the manifesto, the public was being put at risk by unscrupulous manufacturers who made clothes stuffed with unnecessary dyes solely to boost their profits. After sending a copy to the leading organization campaigning for allergy sufferers in England, Ms. Richmond was surprised that the group’s newsletter reported on DRAB and people wrote to her that dye fabrics had caused them all sorts of problems. After the hoax was revealed, the allergy group maintained that dyes did cause allergies and that Ms. Richmond had unwittingly performed a public service by highlighting this problem.

Legal Action

Many doctors who treat “environmental illness” believe that they themselves have it. In 1977 a federal tax court ruled that the extra cost of “organically grown” foods could be deducted as a medical expense by Theron Randolph, M.D., and his wife, Janet. The Randolphins claimed that Janet experienced mental confusion, crossed eyes and difficulty walking, when she inhaled or ingested contaminants, and that Theron had suffered from loginess, malaise, headaches, nausea and anorexia due to contaminated foods.

Many suits have been filed by “ecologically ill” patients seeking reimbursement from insurance companies for their treatment. These suits can be expensive to defend and may trigger an award for punitive damages if a jury concludes that an insurance company has acted in “bad faith” in refusing to pay for clinical ecology treatment. In 1987, the Association of Trial Lawyers of America voted to establish a clearinghouse on ecological illness and its legal aspects. The proposal’s author was Earon S. Davis, J.D., M.P.H., a former executive director of HEAL who also published the bimonthly *Ecological Illness Law Report* and operated a referral service for two hundred interested attorneys.

Claims and lawsuits are also being filed to collect worker’s compensation and Social Security Disability. Although damage awards are limited, individual cases may still be expensive to defend. Some cases involve a large number of workers who claim they were made ill by low-dose exposure to chemicals in the workplace. Other cases involve people who are not physically ill but are afraid that low-dose exposure to environmental chemicals has affected their immune system and may make them susceptible to cancer or other diseases in the future.

Legitimate cases exist where exposure to large or cumulative amounts of toxic chemicals has injured people. But in many of the cases described above, serious immune disorders are alleged

merely because laboratory testing has detected traces of a chemical in the body or has found a minor deviation from “normal” in some measure of immune function. Although no clinical injury is apparent, these plaintiffs are often described as suffering from “chemical AIDS.” Where large numbers of plaintiffs are involved, it is prohibitively expensive for a defendant to examine all of them to provide evidence to rebut the claims. Such “toxic tort” suits also carry a threat of punitive damages if the defendant loses.

Some lawyers foresee a wave of lawsuits sweeping the nation, based on an approach that links many kinds of illness to immune system injury and ties immune injury to exposure to chemicals. There appears to be a growing network among the “traditional” clinical ecologists, plaintiffs’ attorneys and physicians who use questionable interpretations of laboratory data to support claims that virtually any symptom can be caused by exposure to almost anything. These doctors testify that the immune system can become overactive (leading to numerous symptoms) or suppressed (leaving the individual at risk for infection, cancer, rheumatoid arthritis and other diseases). This latter mechanism is referred to as “multiple chemical sensitivity” or “chemical AIDS.” In 1985, based on testimony by two clinical ecologists, a jury awarded \$6.2 million in compensatory damages and \$43 million in punitive damages to thirty-two people who lived near a chemical plant in Sedalia, Missouri. Peter Huber, who analyzed this case and others involving alleged illness due to chemical exposure, concluded that clinical ecologists are “perfectly adapted to modern-day testifying” because they are “adept at prevaricating, playing on credulity, scoring verbal points, forgetting inconvenient data and dredging up convenient anecdotes.”²²

In 1991, a jury in New York City awarded \$489,000 in actual damages and \$411,000 in punitive damages to the estate of a man who committed suicide at age 29 after several years of treatment by Warren M. Levin, M.D., a clinical ecologist. Testimony at the trial indicated that although the patient was a paranoid schizophrenic who thought “foods were out to get him,” Dr. Levin had diagnosed him as a “universal reactor” and advised that, to remain alive, he must live in a “pure” environment, follow a restrictive diet and take supplements. Dr. Levin admitted that since 1974, when he began practicing clinical ecology, he had diagnosed every patient he saw as suffering from environmental illness.²³ In 1992, after a lengthy investigation involving the care of thirteen patients, the New York State Department of Health Board for Professional Medical Conduct stated that Dr. Levin “has a litany of unproven and medically unnecessary tests that he runs on virtually all patients. He uses these tests — whatever their results may be — to convince his patients that his unconventional kinds of treatment are necessary.” The Board found him guilty of “gross negligence,” “fraudulent practice” and “moral unfitness” and recommended that his license be revoked.²⁴

“Candidiasis Hypersensitivity”

Closely aligned with clinical ecology is the concept of “candidiasis hypersensitivity.” *Candida albicans* (sometimes referred to as *Monilia*) is a fungus normally present in the mouth, intestinal tract and vagina. Under certain conditions, it can multiply and infect the surface of the skin or mucous membranes. Such infections are usually minor, but serious and deeper infections can occur in patients whose resistance has been weakened by other illnesses. However, promoters of “candidiasis

hypersensitivity” claim that even when infection is absent, the yeast can cause or trigger multiple symptoms such as fatigue, irritability, constipation, diarrhea, abdominal bloating, mood swings, depression, anxiety, dizziness, unexpected weight gain, difficulty in concentrating, muscle and joint pain, cravings for sugar or alcoholic beverages, psoriasis, hives, respiratory and ear problems, menstrual problems, infertility, impotence, bladder infections and prostatitis.

According to its promoters, 30 percent of Americans suffer from “candidiasis hypersensitivity.” Many clinical ecologists view it as an underlying cause of the “environmental illness” that they postulate. It is also touted as an important factor in AIDS, rheumatoid arthritis, multiple sclerosis and schizophrenia, as well as “hypoglycemia,” “mercury-amalgam toxicity” and other fad diagnoses.

The main promoters of “candidiasis hypersensitivity” have been C. Orian Truss, M.D., of Birmingham, Alabama, author/publisher of *The Missing Diagnosis*²⁵ and William G. Crook, M.D., of Jackson, TN, who wrote and published *The Yeast Connection*.²⁶ Dr. Crook says his book was produced after a 1983 television talk show appearance drew 7,300 requests for further information.

According to Crook, “If a careful check-up doesn’t reveal the cause for your symptoms, and your medical history [as described in his book] is typical, it’s possible or even probable that your health problems are yeast-connected.” He also claims that tests such as cultures don’t help much in diagnosis because “Candida germs live in every person’s body... Therefore the diagnosis is suspected from the patient’s history and confirmed by his response to treatment.”

Crook claims that the problem arises because “antibiotics kill ‘friendly germs’ while they’re killing enemies, and when friendly germs are knocked out, yeast germs multiply. Diets rich in carbohydrates and yeasts, birth control pills, cortisone and other drugs also stimulate yeast growth.” He also claims that large numbers of yeasts weaken the immune system, which is also adversely affected by nutritional deficiencies, sugar consumption and exposure to environmental molds and chemicals. To correct these alleged problems, he prescribes allergenic extracts, antifungal drugs, vitamin and mineral supplements and diets that avoid refined carbohydrates, processed foods and (initially) fruits and milk.

Crook’s book contains a seventy-item questionnaire and score sheet to determine how likely it is that health problems are yeast-connected. Shorter versions of this questionnaire have appeared in magazine articles and in ads for products sold through health food stores.

In 1986, for example, an article in *Redbook* magazine asked readers whether they: (1) have ever taken antibiotics on a frequent basis; (2) have ever been troubled by premenstrual tension, abdominal pain or loss of sexual interest; (3) have recurrent digestive problems; (4) crave sugar, breads or alcoholic beverages; (5) get moderate to severe symptoms when exposed to tobacco smoke; (6) experience fatigue, depression, poor memory or nervous tension; (7) are bothered by hives, psoriasis or other chronic skin rashes; (8) have ever taken birth control pills; (9) are bothered by headaches; or (10) feel bad all over without any apparent cause. According to the article, “If you have three or four ‘yes’ answers, yeast possibly plays a role in causing your symptoms. If you have five or six ‘yes’ answers, yeast probably plays a role in causing your symptoms. If you have seven or more ‘yes’ answers, your symptoms are almost certainly yeast-connected.”²⁷ The article’s author was said to be

“on her way to recovery” from a debilitating case of “the yeast syndrome.”

Proponents of “candidiasis hypersensitivity” refer to this alleged problem with several terms. Dr. Crook prefers “Candida-Related Complex.” Others use the terms “Candida” and “yeast problem.” (The less specific the concept, the more difficult it would be to test the proponents theories.) During the past year, proponents have been suggesting that chronic fatigue syndrome and Candida infections are closely related. Dr. Truss has said he believes that “chronic fatigue syndrome is Candida under a different name.”²⁸

Severe Criticism

The American Academy of Allergy and Immunology has issued position statements strongly criticizing the concept of “candidiasis hypersensitivity syndrome” and the diagnostic and treatment approaches used by its proponents. These statements conclude: (1) the concept of candidiasis hypersensitivity is speculative and unproven; (2) its basic elements would apply to almost all sick patients at some time because its supposed symptoms are essentially universal; (3) overuse of oral antifungal agents could lead to the development of resistant germs that could menace others; (4) adverse effects of oral antifungal agents are rare, but some inevitably will occur; and (5) neither patients nor doctors can determine effectiveness (as opposed to coincidence) without controlled trials. Because many factors influence allergic symptoms, including emotions, experiments must be designed to separate the effects of the procedure being tested from the effects of other factors.²⁹ Several years ago Dr. Crook told me he had no intention of conducting a controlled test because he was “a clinician, not a researcher.”

The antifungal drug most often prescribed by proponents of “candidiasis hypersensitivity” is nystatin (*Mycostatin, Nilstat*), which seldom has significant side effects. However, they also prescribe ketoconazole (*Nizoral*), which has an incidence of liver toxicity (hepatitis) of about 1 in 10,000. The liver injury usually reverses when the drug is discontinued, but ketoconazole has been responsible for several deaths. For this reason it should be prescribed only for serious infections. Both of these drugs are expensive.³⁰ In a recent double-blind trial, the antifungal drug nystatin did no better than a placebo in relieving systemic or psychological symptoms of “candidiasis hypersensitivity syndrome.”³¹

Problems Reported

In 1986 two doctors from Loyola University Stritch School of Medicine reported seeing four young women whose nonspecific complaints included chronic fatigue, anxiety, and depression. All four mistakenly believed they had disseminated candidiasis and were taking nystatin or ketoconazole, which had been prescribed by their family physicians. All had read *The Yeast Connection* and had carried the book into the office during their visits. One patient on ketoconazole had hepatitis, which resolved when she stopped taking the drug.³²

Worse yet, a case has been reported of a child with a severe case of disseminated candidiasis who had been seen by a “Candida doctor” and given inadequate treatment. The report concluded that “the advice of yeast connection advocates may be inappropriate even for illnesses in which

Candida is implicated.”³³

Perhaps the saddest report was a letter in a health food magazine from a woman appealing for help and encouragement. She said that a clinical ecologist had treated her for allergies and Candida for four years. Initial tests had shown that she “was allergic to all foods” as well as to numerous chemicals and inhalants. So far, no treatments had helped.

In 1990 *Inside Edition* aired two segments vilifying Stuart Berger, M.D., a Park Avenue “diet doctor” who wrote *Dr. Berger’s Immune Power Diet* and *What Your Doctor Didn’t Learn in Medical School*. During the first program, a reporter described what happened when she visited Berger complaining of fatigue. So did a prominent New York allergist who consulted Berger with a similar complaint. Both noted that their contact with him lasted about two minutes, included no physical examination and culminated with a diagnosis of chronic fatigue syndrome and allergy to yeast (*Candida albicans*). The reporter’s cost was \$845 for the first visit, with an estimated total of about \$1,500 through the third visit. A former patient described a similar experience which had cost over \$1,000. A former employee said that Berger ordered his employees to indicate on blood test reports that every patient was allergic to wheat, dairy products, eggs and yeast. The reporter’s visit had been filmed with a hidden camera. Berger obtained a court order stopping *Inside Edition* from showing the tape during the initial program. But two weeks later, after the U.S. Supreme Court sided with the producers, the show aired the tape. During the interim, complaints were received from more than a hundred former patients and employees. In 1985, *Dr. Berger’s Immune Power Diet* became an overnight best seller following Berger’s appearance on the *Donahue* show. The book claims that overweight and numerous other health problems are the result of an “immune hypersensitivity response” to common foods and that “detoxification” and weight loss followed by food supplements can tune and strengthen the immune system. There is no scientific evidence to support these claims.

Government Actions

Due largely to Dr. Crook’s promotion, public interest in “candidiasis hypersensitivity” has grown rapidly. Several other books have been published, and many manufacturers have marketed “yeast-free” supplements which presumably are “safer” than ordinary ones. Health food industry manufacturers, including several that market through chiropractors, offered such products as *Candi-Care*, *Candida-Guard*, *Candida Cleanse*, *Candistat*, *Control*, *Yeast Fighters*, *Yeast Guard*, *Yeastop*, *Yeasterol*, and *Yeast•Trol*. Before the *Redbook* article was published, *Control*’s manufacturer notified retailers that an ad in the same issue would “specifically instruct the consumer to go to their local health food store to purchase *Control*.” The ad contained a toll-free number for ordering the product or obtaining further information. According to a company official, more than 100,000 people responded.³⁴

Under federal law, any product intended for the prevention or treatment of disease is a drug, and it is illegal to market new drugs that do not have FDA approval. “Candida” products, however, were claimed to be “dietary supplements,” not medical treatment. However, it was clear that these products were marketed illegally. In 1989 the FDA Health Fraud Branch issued instructions and a

sample regulatory letter indicating that it is illegal to market vitamin concoctions intended for the treatment of yeast infections.

During 1988, the FDA had initiated a seizure of Yeastop, a vitamin concoction claimed to be effective against yeast microorganisms that have become “overgrown” or “out of control.” The manufacturer, Nature’s Herbs, of Orem, Utah, claimed that the product was a “dietary supplement.” But the FDA charged that the therapeutic claims on its label made it an illegal drug. In 1990, a federal judge ruled that Yeastop was a drug and ordered Nature’s Herbs to pay for its destruction and for other court costs and fees. The FDA also seized a supply of *Control*, from its manufacturer, Nature’s Way, of Springville, Utah.

In 1989, Great Earth International, the nation’s second largest health food store chain, agreed to pay \$100,000 in penalties plus \$9,520 in costs to settle charges filed in 1987 by the Orange County (California) District Attorney. The case involved advertising claims for *Yeasterol* (“to control... *Candida albicans*, a troublesome yeast”) and several other products. Without admitting wrongdoing, the company signed a consent agreement pledging to refrain from marketing products that are misbranded or are unapproved new drugs.

In 1990, Nature’s Way and its president, Kenneth Murdock, settled an FTC Complaint by signing a consent agreement to stop making unsubstantiated claims that *Control* is helpful against yeast infections caused by *Candida albicans*. The product is a conglomeration of capsules containing acidophilus, evening primrose oil, vitamin E, linseed oil, caprylic acid, pau d’arco and several other substances. *Control* was promoted with a self-test based on common symptoms the manufacturer claimed were associated with yeast problems. The FTC charged that the test was not valid for this purpose. The company also agreed to pay \$30,000 to the National Institutes of Health to support research on yeast infections.

In 1990, the New Jersey State Attorney General secured consent agreements barring Linda Choi, M.D., and Pruyakant Doshi, M.D., from diagnosing and treating “*Candida albicans* overgrowth syndrome.” Both were assessed \$3,000 for investigative costs and had their medical license placed on probation for one year. Among other things, investigation by the State medical board had concluded that “*Candida albicans* overgrowth” was not generally recognized as a clinical entity and had not been established as the cause of the conditions the doctors treated.

Overview

Several hundred medical and osteopathic physicians practice clinical ecology. They diagnose “environmental illness” in large numbers of patients who consult them. Many of these physicians and an unknown number of chiropractors are also treating “candidiasis hypersensitivity,” while the health food industry is still marketing do-it-yourself “anti-*Candida*” products that lack FDA approval for their intended purposes. Instead of testing their claims with well designed research, proponents of these concepts sell them to the public through books, magazine articles and radio and television talk shows. Many are also part of a network of legal actions alleging injuries by environmental chemicals.

The number of people caught up in this hoopla is unknown. Nor can it be determined what

percentage of them are being helped or harmed. But if “environmental illness” and “candidiasis hypersensitivity” are figments of their proponents’ imagination — which I believe they are — patients who rely on these concepts run the risks of misdiagnosis, mistreatment, financial exploitation and/or delay of proper medical care. In addition, dubious claims for disability and damages burden insurance companies, employers, other taxpayers and ultimately all citizens. Although government regulatory actions have forced several companies to stop making illegal therapeutic claims for “anti-yeast” products, such products continue to be marketed with claims made by word-of-mouth and through the media.

Many people diagnosed with “environmental illness” or “candidiasis hypersensitivity” suffer greatly and are very difficult to treat. The work of Drs. Selner and Staudenmayer suggests that most of them have psychosomatic disorders in which they react to stress by developing multiple symptoms. Knowledgeable critics believe that the theories of clinical ecology are too vague to be defined and tested, and that proponents will cite calls for additional research as evidence that their work raises legitimate scientific issues — which it does not.

The problems described in this report will not be simple to correct. But one thing that might help would be for state licensing boards to examine the activities of the physicians involved and determine whether the overall quality of their care is sufficient for them to remain in medical practice. I believe that most of them deserve to be delicensed.

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Khalsa, D. NAET- A cure for the allergy epidemic. Integrative Veterinary Care. 2015;5(4);42-45. As it happens, there isn't any good evidence to support these claims, which are at best unproven hypotheses. If these notions actually turn out to have some validity at some point, of course, it still won't have anything to do with the dramatic claim that forms the centerpiece of Dr. Khalsa's article; that allergies can be cured by the simple methods she describes. It seems odd that such simple and effective therapies exist and yet allergies, unlike infectious diseases for which there are simple and effective vaccinations, don't seem to be going away. Somehow, this bizarre epiphany led to a revolutionary method of curing allergies. Mainstream allergy diagnosis and treatment is based on classical allergy testing which involves well-validated diagnostic methods and proven methods of treatment. By contrast, a number of unproven tests have been proposed for evaluating allergic patients including cytotoxic food testing, ALCAT test, bioresonance, electrodermal testing (electroacupuncture), reflexology, applied kinesiology a.o. There is little or no scientific rationale for these methods. Results are not reproducible when subject to rigorous testing and do not correlate with clinical evidence of allergy.

@article{Barrett1989UnprovenA, title={Unproven "Allergies": An Epidemic of Nonsense}, author={Stephen Barrett}, journal={Nutrition Today}, year={1989}, volume={24}, pages={6-11} }. Stephen Barrett. Published 1989. Medicine. Nutrition Today. During the past few years, a number of physicians and their patients have been promoting concepts of "allergy" not recognized by the scientific community. Instead of testing these concepts and seeking recognition through scientific channels, they are promoting them to the public through books, magazine articles, and radio and television talk shows. View on There are many fake or unproven medical products and methods that claim to diagnose, prevent or cure COVID-19. Fake medicines sold for COVID-19 may not contain the ingredients they claim to contain, and may even contain harmful ingredients. No vaccine for COVID-19 prevention is available as of October 2020, though there are many worldwide efforts to develop one as soon as possible. As of March 2020, the World Health Organization (WHO) does not recommend any medicines to treat or cure COVID-19 An Epidemic of Nonsense During recent years, several hundred physicians have promoted concepts of allergy and immune dysfunction not recognized by the scientific community. Instead of testing these concepts with scientifically acceptable protocols, they have been marketing them to the public through books, magazine articles, radio and television talk shows and other channels. An Epidemic of Nonsense. During recent years, several hundred physicians have promoted concepts of allergy and immune dysfunction not recognized by the scientific community. Instead of testing these concepts with scientifically acceptable protocols, they have been marketing them to the public through books, magazine articles, radio and television talk shows and other channels.