ORIGINAL RESEARCH

# Results of a Decade of Naturopathic Treatment for Environmental Illnesses: A Review of Clinical Records

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## Abstract

The treatment of chronic health problems associated with exposure to environmental chemicals has heretofore been very difficult. While various detoxification protocols (to remove the toxic nature of the compound) are currently available, there are few depuration (to remove toxins or impurities from the body) protocols. A simple comprehensive naturopathic depuration protocol has provided a solution for many toxic individuals. This review of records shows that such a treatment may be especially beneficial for those individuals with asthma, autoimmune diseases, multiple chemical sensitivities (MCS), gastrointestinal and liver disorders, fatigue, allergies, addictions, selected cancers and neurological disorders. This review of records looked at 112 persons treated for a minimum of 15 sessions with such a protocol for whom there was adequate follow-up information. Of all the various problems treated, 46.4 % of the study participants rated their results as great, 36.6% rated their results as moderate/good for a total of 83% of the participants self-rating their results as good or great.


## Introduction

The twentieth century with its promise of "Better Living Through Chemistry" has produced a host of chemical toxin related illnesses (referred to here as environmental illnesses). Recent articles in the medical literature have shown that the rate of cancers not associated with smoking are higher for those born after 1940 than before, and that this increase in cancer is due to environmental factors not related to smoking (1). There are also new medical diagnoses of sick (closed) building syndrome (2,3), and multiple chemical sensitivity (MCS) (4,5,6,7,8), both of which are known to be related to overexposure to environmental contaminants. The primary action of the major pesticide classes is disruption of neurological function (9). The primary action of solvents is neurotoxicity (10) as well. In addition to being neurotoxins, these compounds are profoundly immunotoxic (11, 12,13) and often poison the endocrine system too (10). Adverse health effects are not limited to only these systems; these compounds can also cause a variety of dermatological, gastrointestinal, genitourinary, respiratory, musculoskeletal, and cardiac problems (8).

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The environment is currently contaminated with chemicals present in air, water, and food. Since 1976, the Environmental Protection Agency (EPA) has been running the National Human Adipose Tissue Survey (NHATS) (14). The researchers with this study took adipose samples from cadavers and elective surgical patients from all regions of the country and measured toxin levels. In 1982 they expanded beyond their normal list to detect a total of 54 different environmental chemical toxins. Results showed that five of these 54 chemicals—octachloradi-benzo-p-dioxin (OCDD), styrene, 1,4-dichlorobenzene, xylene, and ethylphenol—were found in all samples. Another nine chemicals were found in 91 to 98% of the samples, including benzene, toluene, chlorobenzene, ethylbenzene, dichlorodiphenyl dichlorethylene (DDE), three dioxins and one furan. Additionally, polychlorinated biphenyls (PCBs) were found in 83% of the samples and beta-benzene hexachloride (beta-BHC) in 87%. A total of 20 toxic compounds were found in 76 to 100% of all adipose samples. These ongoing assessments have shown that it is not a question of whether individuals are carrying a burden of toxic xenobiotic compounds (those chemicals foreign to the body as defined by Rea (8) and Philp (15)), it is a question of how much and how do they affect health.

While some individuals will point to a specific toxin exposure as the cause of their

illness, in actuality the exposure that initiated the onset of symptoms may be just the "straw that broke the camel's back." As the NHATS study clearly shows, each individual tested was carrying a "soup" of chemicals within. Environmental medicine attempts to make sense of the impact of multiple low-level chemicals on health. The interaction of these chemicals along with numerous individual factors for each person who is exposed and affected must be examined. Some of these factors are: genetic predisposition to disease, competent metabolic activity, stressors of a physical, environmental and emotional nature, diet, nutritional status, and other factors that when put together can adversely affect a person's health.

Since environmental illness is likely a result of multiple chemical exposures accumulated over time along with all of the above listed individual factors, studies looking at the adverse health effect of a single chemical are often inconclusive. The publication in the January 15, 1997 issue of the *Journal of the American Medical Association* of three studies on the Gulf War Syndrome is noteworthy. These studies concluded that multiple, non-fatal doses of pesticides and other chemicals combined to cause a constellation of previously baffling symptoms (16,17,18). Hopefully, this will open the door for other such studies on environmental medicine to be funded and published.

The published literature on the impact of chemicals on health is small, compared to the total amount of published health-related research, but growing. In contrast, the articles on proper treatment for such problems are minuscule. Most of the published literature is from one of the Health Med clinics, associated with the Church of Scientology, that is conducting the Hubbard Purification Rundown. This protocol utilizes exercise, high temperature saunas, increasing doses of niacin and electrolyte replacement. They have published studies showing this protocol reduces levels of PCBs, polybrominated biphenyls (PBBs), and hexachlorobenzene (HCBs) (19,20, 21). Their studies, confirmed by William Rea, MD from the Environmental Health Center - Dallas, have shown that sauna therapy reduces xenobiotic levels in treated individuals (22).

To the author's knowledge, the only published treatment besides sauna therapy that has shown benefit in reducing the level of fat soluble xenobiotic compounds in poisoned individuals is fasting. This has been documented in a study that looked at individuals poisoned by PBB contaminated rice bran cooking oil in Taiwan (23). While fasting reduced the subjects' symptoms, it increased the level of circulating xenobiotics in their serum. Presumably the elevation of circulating toxins was due to the increased rate of lipolysis in fasting individuals, and fat soluble PBBs were released from adipose tissue into the blood stream in higher than normal rates. Once in circulation, PBBs are metabolized in the liver for elimination through bile or urine. If this change does not occur, they are redeposited into the adipose tissue. More research is obviously needed on the role of fasting in the treatment of environmental toxin overload.

Following the basic principles of naturopathic medicine, in 1983 this author began experimentation with various methods of depuration, protocols that remove toxins or impurities from the body. Standard detoxification techniques merely diminish the toxic nature of the compound. The plan was to accomplish this by enhancing normal elimination function that could in turn lower xenobiotic compounds in the body. The initial protocol used a combination of cholegogue and cholerectic herbs along with constitutional hydrotherapy and colonic irrigations; later thermal chamber therapy was added. By January 1987, the first intensive depuration center in the Pacific Northwest was opened. At that time it was hoped that the removal of toxins from the body would allow the self-regenerative powers of the body to work unhindered. This hope turned out to be well rewarded.

## Depuration Protocol

In order to be accepted into the protocol individuals were first screened for evidence that xenobiotics were a causative factor in their illness. This included collecting a medical history and performing a physical examination. Laboratory tests included a complete blood count and general chemistry panel along with a thyroid and adrenal profile. In certain cases, such as those individuals with silicone-related illness, it was important to assess the ability of the adrenal gland to secrete a proper level of aldosterone during a stressful situation. It has been the author's experience that women with silicon-induced illness are sometimes unable to secrete aldosterone in amounts sufficient to maintain proper electrolyte balance during depuration. A 24-hour urine test for adrenal hormones before and after adrenocorticotropic hormone (ACTH) challenge was recommended to monitor this.

Serum levels of chlorinated pesticides and solvents were tested in some of the individuals, along with heavy metal levels in the hair or urine (via a 24-hour urine catch after a 2,3-dimercapto-1-propane sulfonic acid (DMPS) challenge). Immune system testing was done on some persons to look for immunotoxicity patterns via lymphocyte levels, natural killer cell activity, auto antibody and chemical antibody levels. If a patient was affected by a chemical not measurable with serum testing, then the immune profile provided some evidence of toxic damage. A functional liver detoxification panel and oxidative stress panel were done to provide information about the liver's ability to handle chemicals. Food sensitivities were tested for, along with stool cultures of *Candida spp* and stool levels of secretory IgA to determine the endotoxin load on the liver. An electrocardiogram (EKG) was done to identify potential cardiac problems with the thermal chamber therapy. Finally, a psychological screening was performed to differentiate between organic psychological problems and symptoms of neurotoxicity. Neurotoxicity symptoms typically improve with depuration therapy, but organic psychiatric problems may require standard psychiatric interventions.

After acceptance into the program, the depuration protocol began. This protocol consisted of the following components which were done daily (5 days weekly) for 3 - 6 weeks:

1. Daily Exercise - Consisted of using exercycles, a rebounder or brisk walking to begin lipolysis and diaphoresis.

2. Thermal Chamber - Up to three 60-minute sessions at a range of 120-135 degrees F alternated with cool-down periods. Bottled spring water and electrolyte replacement

were provided. While the Hubbard clinics use higher temperatures, this researcher has found that individuals release more toxins (as evidenced by stronger chemical odors), and experience fewer adverse symptoms when the lower temperatures are used. The thermal chambers are thought to increase the rate of lipolysis in the adipose tissue throughout the body. When this occurs lipophilic xenobiotics are released into the blood stream. Compounds in subcutaneous fat pads are mobilized both into the blood and out through perspiration.

3. Constitutional Hydrotherapy (CH) - This therapy - alternating hot and cold towels on the torso, along with sine wave stimulation - was developed by O.G. Carroll, ND and Harold Dick, ND to help stimulate immunity and thus healing. (*Ed: See related article on Constitutional Hydrotherapy in this issue.)* CH also increases the amount of toxin-laden bile excreted from the liver into the intestines, as evidenced by the increased number of bile releases visible during colonic irrigation (see below). To assist with this cholerectic and cholegogue action, all patients are given a daily herbal capsule consisting of *Chelidonium majus* (greater celandine), *Chionanthus virginicus* (fringetree), *Taraxacum officinalis* (dandelion), *Arctium lappa* (burdock), *Silybum marianum* (milk thistle) and *Urtica dioica* (nettles).

4. Colonic Irrigation - Gravity fed machines were used to gently introduce triple-filtered water into the large intestine, providing an avenue for the toxic bile to rapidly leave the body. Individuals routinely have "liver dumps" of bile—i.e., concentrations of bile not bound with stool—ranging in color from yellow to red, with occasional gray or brown. Normally bile color ranges from green to red depending upon the time of exposure to bacterial action in the bowel. However, in these situations it is apparently released from the liver and rapidly passed through the small intestines, similar to what is seen in gastric dumping syndrome. The source of the different colors of this effluent is unknown. In some patients with heavy agricultural exposure, high amounts of fluorescent yellow bile have been noted. Hence, the color of the bile may be more attributable to the chemicals in the bile, rather than the bacterial action on the bile. The presence of chlorinated pesticides in these effluents, referred to as "bile dumps", has been documented at the Northwest Healing Arts Center in Bellevue, Washington (24).

5. Constitutional Homeopathy - This is often used as a stand-alone treatment without use of other supplements or treatments. However, it has been found to be a valuable component of this protocol and completely compatible with the other methods involved.

6. Body Therapies (massage, shiatsu, craniosacral, visceral manipulation (*Ed: See related article in this issue*), chiropractic) - These are done as needed to treat specific musculoskeletal problems and to assist with mobilization of some toxins stored in the connective tissues into the lymphatic system.

7. Counseling - A counselor is available to assist patients with problems associated with having a long-term chronic illness, and any emotional or mental issues that arise during the cleansing process.

8. Supplementation: The following items were regularly used. Dosages varied depending on individual need:
   a. Vitamin C - 3,000 -12,000 milligrams daily
   b. Vitamin E - 400 to 1,200 international units daily of d-alpha tocopherol
   c. N-acetyl cysteine - 370 to 2220 milligrams daily
   d. Taurine - 500 to 1500 milligrams
   e. Phosphatidyl choline-bound silybum marianum - 100 to 300 mg daily
   f. Psyllium - ½ teaspoon daily
   g. Selenium - 100 to 600 micrograms daily
   h. Multiple vitamin and mineral - 1 to 3 pills daily

Additional supplementation was added based on the needs of the individual.

## METHOD

This paper reviewed the records of 148 persons who went through three weeks (15 sessions) or more of the above protocol in the 10 years between January 1987 and January 1997. The charts on all these individuals were reviewed and a one-page questionnaire sent to all. The questionnaire asked eight questions about their treatment (see below, and see Table 1 for the distribution of responses to the question on improvements to their health):

- What was the primary health condition they wanted the program to address?
- How long had this problem existed?
- How many weeks were they in the program?
- What treatments were included?
- How did they rate the impact of the program on their specific health problem?
- Were there improvements to the state of their general health from the program?
- Had they returned for follow-up care?
- Were there any improvements they would like to see made to the program?

A total of 112 persons was included in this review because either there were specific chart notes about the status of their chief complaints after completion of the protocol, or they returned a completed questionnaire. The study group consisted of 82 females (ranging from 24 to 70 years old, average age 41.8) and 30 males (age range from 18 to 72, average age 43.6). An additional 36 persons who went through the protocol but for whom information was incomplete (incomplete chart notes and failure to com-

plete and return the questionnaire) were not included in the study. There were no other criteria for selection in this review.

Treatment results were graded as: "worse", "no change", "slight" improvement, "good/moderate" improvement or "great" improvement. Each participant was graded according to statements they made as recorded in their chart or in follow-up questionnaires sent to them recently.

### Types of Problems Treated

While individuals typically came in with multiple complaints they have been categorized by their primary complaint as listed below:

Multiple Chemical Sensitivity (MCS)- (24 persons) Each of these individuals exhibited adverse symptoms after coming in contact with chemicals at ambient levels that do not elicit symptoms in other individuals. They all fit the diagnostic criteria for chemical sensitivity published by Cullen (4).

Autoimmune Disease - (16 persons) Each individual came with an established diagnosis of autoimmune disease from a rheumatologist or endocrinologist. They all fit the standard diagnostic criteria for their diagnosis; this was confirmed with appropriate blood work. These diagnoses included: fibrositis, rheumatoid arthritis, thyroiditis, systemic lupus erythematosis (SLE), silicone-related multiple connective tissue autoimmune problems. (See Table 2 for the number of persons with each diagnosis.)

Neurological Problems - (15 persons) Each individual came with an established diagnosis from their family physician, neurologist or ophthalmologist. These conditions included: depression, anxiety, chronic diffuse toxic encephalopathy, headache, short-term memory loss, obsessive/compulsive behavior (O/C), borderline personality disorder, retrobulbar neuritis, and Parkinson's syndrome. (See Table 3 for the number of persons with each diagnosis.)

Fatigue - (14 persons) Each individual came with the primary complaint of fatigue. Unfortunately, those who fulfilled the criteria for chronic fatigue syndrome were not distinguished from those who were just chronically fatigued.

Cancer - (8 persons) Each came with a diagnosis of cancer. Types included: breast, Hodgkin's lymphoma, prostate, soft tissue sarcoma (STS), and lung. The respective numbers are listed in Table 4.

Allergies - (7 persons) Each person experienced rhinitis, lacrimation and other typical allergic symptoms from exposure to environmental allergens such as dust, pollens, molds, animal dander. While not all had testing done, all experienced alleviation of symptoms with avoidance of the allergen and exacerbation with its reintroduction.

General Cleansing - (7 persons) Five of these individuals either had a known exposure to a certain chemical that concerned them, or they had elevated xenobiotic levels found in their serum. Two of these individuals went through the program because they felt that their body was toxic.

Musculoskeletal Problems- (5 persons) Each of these persons had chronic myalgia with arthralgias. All had been to rheumatologists and found no help using conventional therapies.

Dermatological Problems - (4 persons) Two had atopic dermatitis, two had non-specific dermatitis.

Respiratory Problems - (3 persons) All had asthma.

Gastrointestinal(GI)/Liver Problems - (3 persons) One person had irritable bowel syndrome, one had cirrhosis of the liver, one had elevated liver enzymes.

General Debility - (3 persons) Two of these individuals were bedridden for most of the day with fatigue and multiple symptoms; both stated that they had not felt good in years. Each had been to numerous physicians without any specific diagnosis or improvement. Neither experienced any symptomatic changes with this cleansing program. The third individual also had vague symptoms; however, he had numerous pesticides present in his serum and he improved with cleansing.

HIV/AIDS - (2 persons) Both had verified diagnosis of HIV, and AIDS.

Addictions - (1 person) This individual was brought in by family for assistance in his recovery from marijuana and cocaine abuse.

### Results of 15 or More Sessions of Tissue Cleansing and Restoration Program

| Complaints | Worse | No Change | Slight Change | Mod./ Good | Great | Total |
|---|---|---|---|---|---|---|
| MCS | 0 | 2 | 1 | 8 | 13 | 24 |
| Autoimmune | 0 | 0 | 0 | 4 | 12 | 16 |
| Neurologic | 0 | 3 | 2 | 4 | 6 | 15 |
| Fatigue | 0 | 1 | 0 | 6 | 7 | 14 |
| Cancer | 0 | 2 | 0 | 2 | 4 | 8 |
| Allergies | 0 | 0 | 1 | 5 | 1 | 7 |
| General Cleansing | 0 | 0 | 2 | 5 | 0 | 7 |
| Musculoskeletal | 0 | 0 | 2 | 2 | 1 | 5 |
| Dermatological | 0 | 0 | 0 | 3 | 1 | 4 |
| Respiratory | 0 | 0 | 0 | 0 | 3 | 3 |
| GI/Liver | 0 | 0 | 0 | 1 | 2 | 3 |
| General Debility | 0 | 1 | 1 | 0 | 1 | 3 |
| HIV/AIDS | 0 | 0 | 1 | 1 | 0 | 2 |
| Addictions | 0 | 0 | 0 | 0 | 1 | 1 |
| Totals | 0 | 9 | 10 | 41 | 52 | 112 |
| Percent | 0% | 8.00% | 9.00% | 36.60% | 46.40% | 100.00% |

Table 1

### Results

Despite the fact that the chief complaints were diverse, results were consistent. The results for each of the problem categories are listed in Table 1. Of all problems treated with the depuration protocol, 83% of the participants rated their results as

"good" or "great." The two conditions in which 100% of the participants reported "great" results were asthma (n=3), and addiction recovery (n=1). There were several categories in which 100% of the participants rated their results as "moderate/good" or "great." Those categories were autoimmune disease, dermatological problems, and GI/liver problems. The categories with the next highest ratings of "moderate/good" and "great" were fatigue, with 92% improvement, allergies with 85%, and chemical sensitivities with 84%.

By looking at the specific autoimmune diagnoses it becomes clear that the depuration protocol was associated with positive results for all types of autoimmune diseases. It had consistently "great" associations for those with connective tissue problems, specifically: fibrositis (now termed fibromyalgia), mixed connective tissue disorder, and for the four silicone toxicity patients who all had connective tissue disorders (see Table 2). Arthritis showed varied associations, with one rheumatoid arthritis patient rating the results as "good" and one as "great" along with one case of psoriatic arthritis who rated the results as "good." Multiple sclerosis was put into this category, rather than neurologic, because of its autoimmune nature. The results with this problem were also split, with one "good," and one "great." Patients with lupus who often benefit from depuration (25), showed "great" results.

Individuals with primarily neurological complaints had the highest number of "no change" comments of any category. In looking more closely at this group (Table 3) the subgroups of anxiety, headache, retrobulbar neuritis, obsessive/compulsive behavior, and Parkinson's disease showed the best results. In addition, two out of three cases of depression disorder rated "good" or "great" with the third rating "slight improvement." The results for patients with toxic encephalopathy were also split, with one reporting "great" results and one reporting "no discernible change."

The patients with cancer who experienced the most improvement reported "great" results (see Table 4). The two cases reporting "no change" both presented with end-stage disease with metastases. The patient with lung cancer was also end-stage when he arrived and had been told he had two weeks to live. However, he did not have metastases. After depuration, he recovered his strength and stamina, was able to discontinue bottled-oxygen use and survived for an additional two years.

There may also be some bias reflected in this review because chart notes were used as the primary source of information instead of all results coming from an anonymous questionnaire (it was optional for the respondent to put their name on the form). Since chart notes used were

**BREAKDOWN OF AUTOIMMUNE COMPLAINTS**

| Complaint | Worse | No Change | Slight Change | Good | Great | Total |
|---|---|---|---|---|---|---|
| Thyroiditis | 0 | 0 | 0 | 0 | 1 | 1 |
| Rheumatoid Arthritis | 0 | 0 | 0 | 0 | 2 | 2 |
| Psoriatic Arthritis | 0 | 0 | 0 | 1 | 0 | 1 |
| Mixed Conn. Tissue | 0 | 0 | 0 | 0 | 2 | 2 |
| Fibrositis | 0 | 0 | 0 | 0 | 1 | 1 |
| Polyarteritis Nodosa | 0 | 0 | 0 | 0 | 1 | 1 |
| Silicone-related Conn. Tiss. Disorder | 0 | 0 | 0 | 0 | 4 | 4 |
| Multiple Sclerosis | 0 | 0 | 0 | 1 | 1 | 2 |
| SLE | 0 | 0 | 0 | 0 | 1 | 1 |
| Total | 0 | 0 | 0 | 2 | 13 | 15 |
| Percent | 0% | 0% | 0% | 13% | 87% | 100% |

**TABLE 2**

## DISCUSSION

The principles of the Tissue Cleansing and Restoration (TCR) program are simple: remove the toxins from the body thereby allowing the healing power of the body to work unhindered. The results of this review of records were surprising in the high percentage of positive results that such a relatively simple procedure made against tough health problems. This records review did not look at everyone who went through depuration at this facility, as patients with incomplete information and those on other cleansing protocols were eliminated. It is possible that those without adequate follow-up chart notes and who failed to return the questionnaire did so because the program did not benefit them. If it is assumed that those 36 persons had "no change," the percentages would change to 30% of participants with "no change" and a total of 62.8% who experienced "good" or "great" relief. Even with those numbers this type of approach still bears further study.

based on statements given to the researcher in his office there is a possibility that the Rosenthal effect of "pleasing the doctor" may have biased the results in a favorable light. However, only 12.5% of the questionnaire respondents refrained from identifying themselves which allowed the author to correlate statements in the chart notes with those on the questionnaire. Of the named respondents, all but two reported their results to be the same in both the chart notes and the questionnaire. These two had both been listed as having "slight" improvement from the chart notes but stated that they had "great" improvement in the questionnaire. This discrepancy could be due to poor charting on the part of the researcher or further improvement after the completion of the program as they continued home cleansing. This may also imply that some other results gleaned from the chart notes may be rated lower than they should be.

It is unfortunate that only 24 of the 148 questionnaires were

**BREAKDOWN OF NEUROLOGIC COMPLAINTS**

| Complaints | Worse | No Change | Slight Change | Good | Great | Total |
|---|---|---|---|---|---|---|
| Toxic Encephalopathy | 0 | 1 | 0 | 0 | 1 | 2 |
| Anxiety | 0 | 0 | 0 | 0 | 2 | 2 |
| Depression | 0 | 0 | 1 | 1 | 1 | 3 |
| Headache | 0 | 0 | 0 | 1 | 1 | 2 |
| Memory | 0 | 2 | 0 | 0 | 0 | 2 |
| Neuritis | 0 | 0 | 0 | 0 | 1 | 1 |
| Obsessive/ Compulsive | 0 | 0 | 0 | 1 | 0 | 1 |
| Parkinson's | 0 | 0 | 0 | 1 | 0 | 1 |
| BPD | 0 | 0 | 1 | 0 | 0 | 1 |
| Totals | 0 | 3 | 2 | 4 | 6 | 15 |
| Percent | 0% | 20.00% | 13.30% | 26.70% | 40.00% | 100.00% |

**TABLE 3**

returned completed, while 36 were returned as undeliverable. An outcome assessment based solely on completed questionnaires would be desirable. This researcher will pursue this method in further studies of depuration program participants.

The persons treated for general debility had the poorest response of any group. The one case from this group claiming "great response" was found to have a high number of chlorinated pesticides in the serum while the other two did not. Originally, this was interpreted to mean that they were toxic with compounds outside of testing parameters. One individual did have markers in immunological testing that strongly indicated chemical immunotoxicity. However, in retrospect they were probably not good candidates for this protocol since no xenobiotic load was detectable. The two cases of general debility that did poorly also had personality traits identical to the individual with borderline personality disorder (BDP) who also did not fare well in the program. Based on these experiences we no longer accept persons who fit the DSMIII diagnostic criteria for BDP as patients for this protocol.

It should also be noted that none of those who participated in the program for the purpose of general cleansing rated their results as "great." The lack of physical symptoms in these individuals had made it difficult to gauge improvement.

It was also clear that those persons who benefited least from the program often had the lowest levels of pesticides and solvents in serum tests. While there were a few exceptions to this, the trend is clear enough to warrant changing the screening procedure for this protocol. In the future, adequate serum testing of chlorinated pesticides and solvents will be a requirement before starting the procedure. On the other hand, this program worked best for those with multiple chemical sensitivities, chronic fatigue, autoimmune disorders, certain neurologic problems and asthma.

After reviewing all of these cases, it is clear that proper follow-up after protocol completion is essential for the maintenance and improvement of any benefits gained. While a few individuals reported only "slight" improvement immediately upon cessation of the protocol, with continued improvement afterward, more individuals noted that if they failed to keep up their cleansing their symptoms would slowly return. Time spent at this facility represents only the beginning of cleansing. Patients are told to plan on cleansing for at least one year, most of which is done at home. Those who continued cleansing in this manner had the best results; those who did not often had poorer long-term results.

This review of records found that individuals reporting "great" improvement averaged 22.6 days of cleansing while those reporting only "good" results averaged 18.5 days. In future, the number of days in the program and the number of sessions of home follow-up cleansing need to be studied. When this program began, a treatment length of 18 sessions was used. As a result of this review, a minimum of 20 sessions is recommended for some problems, while a minimum of 30 sessions is recommended for those with chemical sensitivity and cancer. Recommendations for the length of time in the program are now also based on the level of xenobiotics found in the blood.

**BREAKDOWN OF CANCERS**

| Complaints | Worse | No Change | Slight Change | Good | Great | Total |
|---|---|---|---|---|---|---|
| Breast | 0 | 1 | 0 | 1 | 1 | 3 |
| Prostate | 0 | 0 | 0 | 0 | 1 | 1 |
| Hodgkin's | 0 | 0 | 0 | 1 | 1 | 2 |
| Lung | 0 | 0 | 0 | 0 | 1 | 1 |
| STS (with mts) | 0 | 1 | 0 | 0 | 0 | 1 |
| Totals | 0 | 2 | 0 | 2 | 4 | 8 |
| Percent | 0% | 25% | 0% | 25% | 50% | 100% |

**TABLE 4**

## SUMMARY

The treatment of chronic health problems arising from environmental chemical overload has heretofore been very difficult. A simple comprehensive naturopathic depuration protocol seems to be a solution for many individuals. This review of records showed that such a treatment may be especially beneficial for those individuals with asthma, autoimmune diseases, chemical sensitivities, gastrointestinal and liver disorders, fatigue, allergies, addictions, selected cancers and neurological disorders. It is hoped that this review of records will serve as a stimulus for further research into the area of treatment for environmentally poisoned persons.

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## BIOGRAPHY

Walter J. Crinnion, ND received his BS in Biology from the University of San Francisco in 1975, and his ND from Bastyr University in 1982. He began general family practice in Bellevue, WA in 1982, and in 1987 opened the country's most comprehensive cleansing facility for individuals who have been poisoned by environmental chemicals. He has been a faculty member at Bastyr University since 1991, teaching Geriatrics and Clinical Ecology. He is also adjunct faculty for Southwest College of Naturopathic Medicine, teaching Environmental Medicine. He is a frequent lecturer at the annual conferences of the American Association of Naturopathic Physicians.