Science References

Following are titles and abstracts with limited quotes from only a few of the extensive science references pertinent to Narconon drug rehabilitation and education.

CONTENTS:

Separately attached are two full papers, plus a rather formal description of the Narconon drug rehabilitation program by Dr. Alfonso Paredes, Member Narconon International Science Advisory Board.

Intermediate Sanctions for Juvenile Offenders: A Utah Juvenile Court Case Study (*Delivered to the 2005 Western Attorneys General Conference on Maui*)

"Chemical Exposures at the World Trade Center: Use of the Hubbard Sauna Detoxification Regime to Improve the Health Status of New York City Rescue Workers Exposed to Toxicants." (Townsend Letter for Doctors and Patients, #273, April 2006)

The Narconon Drug Rehabilitation Program – A Descriptive Overview (Dr. Alfonso Paredes)

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This first article by Cecchini and Lopresti details research showing that drugs and other fat-soluble chemicals can store in the "sink" of adipose tissue and, even with low concentrations in blood, can have "'low-dose' clinical-effect on re-release." The article explains that:

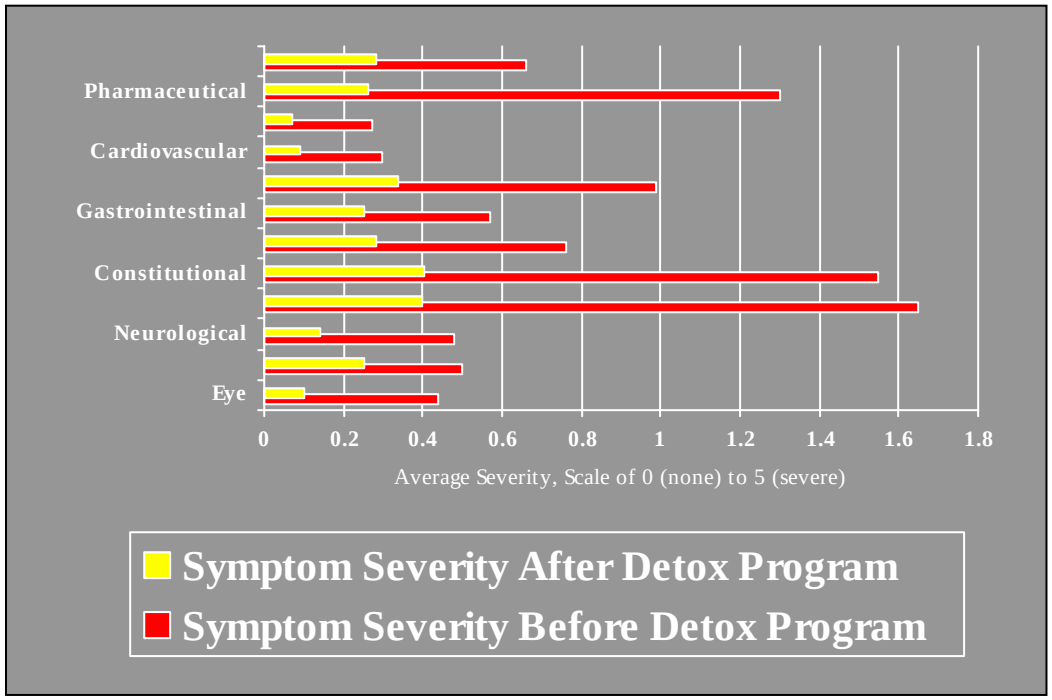
> … current literature points to studies that detected many different drugs and their metabolites for up to 6 weeks after cessation of drug use. And although longer residence times have not been evaluated, retention patterns indicate the possibility of even longer storage. For lipophilic chemical structures for which no convenient biochemical transformation/elimination path-way exists, it seems reasonable to postulate potentially very long residence durations in adipose. Disposition and probable long-term storage of drugs and other toxins has a high potential for long-lasting metabolic alterations with a likely role in drug reversion.

The article also specifically addresses the value of the Hubbard detoxification regime. It states:

> The Hubbard method of detoxification, a regimen including exercise, sauna bathing, and vitamin and mineral supplementation, is a rehabilitative treatment intervention developed to aid in the broad elimination of chemicals and thereby address adverse health affects resulting from chemical exposure and tissue accretion [cit.]. Its safety and effectiveness in treating a wide range of exposures have been established for more than two decades.
>
> This regimen has been implemented as one component of the Narconon Drug Rehabilitation Program, since1979 (the Narconon program is a completely drug free, social-educational program with a series of standardized components).The Hubbard sauna detoxification method has been delivered to over 21,000 individuals to address cravings and other protracted withdrawal symptoms stemming from the physical aspects of addiction.

Reduction in severity of negative physical symptoms

The paper also reports that in one study, 249 subjects self-reported the severity of physical symptoms before and after the sauna detoxification. Figure One (extracted from the paper) below shows diminishment in reported severity upon completion of the Hubburd sauna regimen.



Evidence of drug metabolites flushing out in sweat

Preliminary data indicate the ability of this method to eliminate cocaine and valium metabolites in sweat and urine of recovering addicts for up to 5 weeks following the start of sauna treatment [cit.]. Another chart from the paper documents the registry of cocaine metabolites flushed by the Hubbard procedure, appearing in sweat and urine (Figure 2, cit.):

See Next Page.

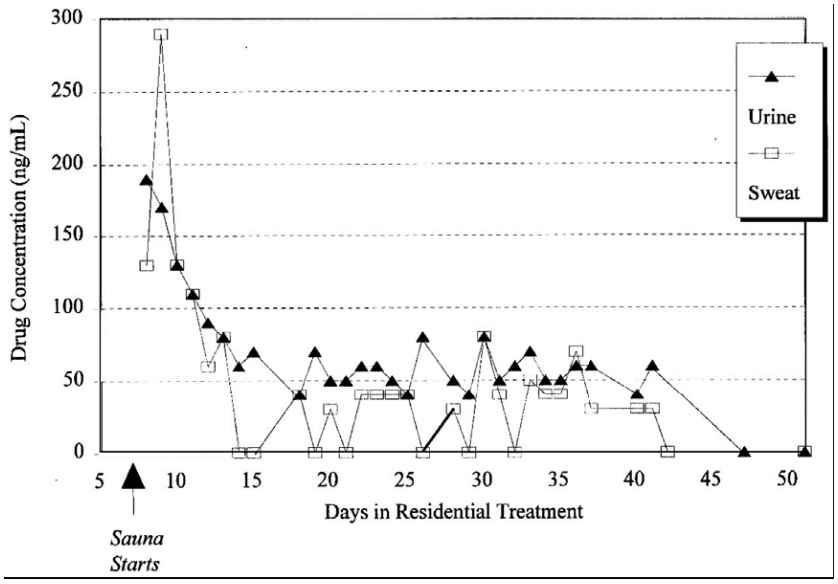


Figure Two

The following is the full ABSTRACT of the Cecchini/LoPresti article. The full paper itself is available online.

ABSTRACT

For decades, scientists have investigated the environmental and human health effects of synthetic chemicals. A growing body of research has illuminated the spectrum of consequences deriving from our reliance on theses substances and their proliferation in air, water, soil and the food chain. Of particular concern is the fact that residues of many man made chemicals are now detectible in virtually every person. A key to a chemical's tendency to persist in tissues once it has entered the body is its lipophilicity. Substances that are poorly soluble in water and quite soluble in fat have relatively free access, via lipid-rich cellular membranes, to the cells of all organs including the ability to cross the blood–brain and placental barriers. Substantial data exist demonstrating that in addition to pollutants, drugs and their metabolites dispose to tissues high in fat content, including brain and adipose. While their characteristic lipophilicity permits drugs and medications to reach target tissues, thereby producing therapeutic effects in the present, current perceptions of risk may be ignoring the possibility that adipose accumulations of illicit drugs and pharmaceuticals may lead to future pattern so fill health similar to those associated with exposure to other categories of xenobiotic chemicals. Empirical data are beginning to characterize the myriad regulatory functions of adipose hormones, including roles in cravings, cognitive function, energy level, and inflammation as well as changes in adipose hormone levels associated with

drug use. Included in this data are the observation that a rehabilitative treatment intervention introduced by L. Ron Hubbard in 1978 to aid in the broad elimination of chemicals from body stores improves symptoms common to both chemical exposure and drug addiction. The regimen, which includes exercise, sauna bathing, and vitamin and mineral supplementation, is utilized by nearly 70 drug rehabilitation and medical practices in over 20 countries. At present, much more is unknown than is known regarding long-term drug retention and effects. This subject deserves careful evaluation given its potential implications for health and chronic illnesses of poorly defined etiology (such as chronic fatigue syndrome), as well as drug abuse prevention, drug rehabilitation, forensic and legal areas.

Cecchini M, LoPresti V, “Drug residues store in the body following cessation of use: Impacts on neuroendocrine balance and...”, Med Hypotheses (2006), doi:10.1016/j.mehy.2006.08.035

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"Rehabilitation of a Chernobyl Affected Population Using a Detoxification Method"
***Proceedings of the 1998 International Radiological Post-Emergency Response Issues Conference, Washington D. C.*(Co-sponsored by the US Environmental Protection Agency, Center for Disease Control, Dept of Defense, and others)**

Anatoly F. Tsyb, M.D., and E.M. Parshkov, M.D. (*Medical Radiological Research Center of Russian Academy of Medical Sciences, Obninsk, Russia*),
J. Barnes (*Foundation for Advancements in Science and Education [FASE]; Los Angeles, CA*)
V. V. Yarzutkin and N.V. Vorontsov (*Kaluga Regional Detoxification Center, Russia*)
V.I. Dedov (*International University of Nature, Society and Man "Dubna"; Moscow, Russia*)

This paper is a review of the use of the Hubbard detoxification program to treat 24 males ages 20-40 who were long-term residents of areas contaminated by radiation, specifically the aftermath of the Chernobyl nuclear reactor explosion, many of the residents having been emergency workers cleaning up the radioactive fallout and other debris. In addition to many other physical and psychological tests 22 biochemical parameters of the blood were analyzed before, during, and after the procedure. In their "Conclusion" the authors make the following statements regarding the safety, healthfulness, and other benefits observed concerning this detoxification procedure:

> Conclusion:
>
> There is evidence suggesting that the program revitalizes the immune system and improves the general physical condition of the participant….There is an absence of negative health effects…
>
> In addition, the detoxification program devised by Hubbard possesses a powerful psychotherapeutic potential…
>
> Increases in physical and mental endurance, activity level, and resistance against stress can be expected….

The full paper can be found by date and name under the section "About Detoxification" on the website of the International Association of Detoxification Specialists: www.detoxacademy.org.

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Intermediate Sanctions for Juvenile Offenders: A Utah Juvenile Court Case Study

Michael R Phillips, MPA; Marie A Cecchini, MS; John H. Wolfe, MS; Robert Graves, MS

This paper, delivered to the Western Attorneys General Conference held on Maui in September, 2005, shows another use of the Hubbard Detoxification program as well as the full Narconon life skills course materials, this time as a core aspect in a juvenile offender rehabilitation program. It is a "tracking report" describing the outcomes achieved in a Fourth District Juvenile Court program which utilized the Narconon drug rehabilitation program, integrating it within court-directed probation services, to address juvenile offenders.

> The Narconon program, an outpatient service based on secular materials developed by L. Ron Hubbard, consists of a series of modules to address physical aspects of substance abuse as well as underlying social and life skills that may be deficient in young abusers. Participants complete a detoxification program designed to eliminate drug cravings by improving nutritional status and reducing body stores of drug residues. The detoxification regimen includes exercise, sauna and vitamin-mineral supplementation. The Narconon program also includes self-paced training in study habits and communication (oral and written). Additional training materials address the subjects of moral and ethical standards, how to set and achieve goals, and personal responsibility.
>
> This program was implemented in partnership with court officials and probation officers in the Fourth District Juvenile Court, in the context of implementing new juvenile sentencing guidelines for State Supervision. The court hoped to reduce the rate at which these youths penetrated deeper into the justice system, and to achieve a reduction in placement costs.
>
> It should be noted that the District had saved "the worst of the worst" for this trial program (knowing in advance it was coming several months prior to its implementation). More than half were candidates for confinement or community placement (removal from their homes) rather than state supervision, the new sentencing guideline's last-chance sanction.

The results were clear:

Participants in the Narconon program, whether they completed the program or not, showed a 77.7 percent reduction in criminal activity. Program completion intensified the desired change of behavior. Seventy-four of the 100 juveniles completed the intervention. Of these, 63.5 percent remained completely misdemeanor and felony free for the remainder of their juvenile history.

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SOURCE REFERENCES REGARDING NIACIN, VITAMIN B3

Following is a discussion of the safety of niacin (B3), *comparing the difference between the effects of* "sustained-release" *niacin (often shown to be harmful) and* "crystalline, instant-release" *niacin on the liver.* The Narconon procedure only uses crystalline instant-release. *The most commonly reported unpleasant effect of niacin (nicotinic acid) is a skin flushing reaction that has no known adverse consequences, other than producing an "itching" sensation for a few minutes.*

Niacin's safety *is reviewed in literature spanning more than 50 years and numerous clinical trials. Niacin in many formulations has been used for decades at doses above 1500 mg per day to treat hypercholesterolemia.[7;14] More recently its been shown that niacin possesses antioxidant, anti-inflammatory, and other beneficial effects on atherosclerosis additional to its lipid lowering properties.[10]*

Niacin has also been evaluated for its benefits in a number of other diseases. Recent large clinical trials of unmodified nicotinic acid at 3000 mg per day[3] and extended-release niacin at 1500 mg per day[4], concluded niacin was effective, safe, and well-tolerated for dyslipidemia associated with type II diabetes. Safety of up to 3000 mg per day of the niacinamide form has also been reported in prevention trials for type I diabetes.[6] There are many years of reports on niacin use in adjunctive treatment of schizophrenia.[13] Niacin plays a key role in regulating the elimination of foreign substances from the body, and has potential therapeutic uses in metabolic syndrome.[11]

The Coronary Drug Project – the only cardiovascular disease clinical trial that has used niacin monotherapy – all other trials have evaluated niacin in combination with other medications – showed that treatment with unmodified nicotinic acid produced a significant decrease in mortality rate 15 years after niacin treatment was discontinued. This was in striking contrast to the minimal effects on long-term mortality in men originally assigned to the other treatment groups or placebo and also correlated with decreasing definite nonfatal recurrent myocardial infarction.[1]

Unmodified or immediate release niacin has been safely used for almost 50 years in doses as high as 12000 mg per day. The most commonly reported unpleasant effect of nicotinic acid is a flushing reaction that has no known adverse consequences.[5] Typically, immediate release niacin has a higher rate of flushing episodes compared with other formulations of niacin, and may also result in gastrointestinal discomfort.[12] Modified forms of niacin have been developed in an effort to reduce the 'flushing' effect. Although these time-release preparations have a lower flushing rate compared with immediate release niacin, several formulations have been shown to be liver toxic [15]. Almost all reports of severe hepatitis have been associated with long-term *use of sustained-release and extended-release formulations at levels above 3000 mg per day.[2;7-9] The niacinamide form of niacin is not a vasodilator and does not cause a 'flushing' effect; however, it also does not change blood cholesterol levels.*

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SOURCE REFERENCES REGARDING THE STORAGE AND EFFECTS OF DRUG AND OTHER TOXINS IN BODY TISSUE

The following references provide details concerning storage of drug and other other related toxins in body tissue.

The first paper concerns cannabinoids in adipose tissue, increasing even two weeks after the administration of the drug.

The Journal of Clinical Pharmacology

***Journal of Clinical Pharmacology*, 1981; 21:208S-214S**
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The kinetics of cannabinoid distribution and storage with special reference to the brain and testis

G Nahas, C Leger, B Tocque, and H Hoellinger

Male and female rats were given either single or repeated intramuscular injections of 2 microCi of 14C-delta 8-tetrahydrocannabinol. They were sacrificed by groups of three at regular intervals 2, 3, 4, 6, or 24 hours after the last injection. Samples of blood lung, brain and pituitary, spleen, liver, fat, testis, and ovary were removed. Some samples were pyrolysed in an automatic oxygen train system to measure 14C-CO2, which reflects total cannabinoid concentration; other samples were kept for measurements of individual cannabinoids after extraction. After a single administration of 14C-delta 8-THC, maximal concentration of total radioactivity was reached in the brain between 2 and 4 hours amounting to 6 ng/gm tissue, or 0.06 per cent of the administered dose. After two weeks of chronic administration, concentrations of radioactivity progressively increased in liver and neutral fat, while cannabinoid levels in brain and testis remained unchanged. These data illustrate the efficiency of the blood-brain and blood-testicular barrier in limiting the access and accumulation of cannabinoids in these tissues.

http://jcp.sagepub.com/cgi/content/abstract/21/8_suppl/208S

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This essentially shows that there must be long term storage of drugs in adipose tissue – otherwise it would not be possible to have adipose concentrations higher than the blood concentrations in instances in which the drug caused death.

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Drug deposition in adipose tissue and skin: evidence for an alternative source of positive sweat patch tests

Joseph A. Levisky[a], David L. Bowerman[a], Werner W. Jenkins[a] and Steven B. Karch[b]

[a] El Paso County Coroner's Office, Colorado Springs, CO 80903, USA
[b] Assistant Medical Examiner, City and County of San Francisco, Hall of Justice, 850 Bryant Street, San Francisco, CA 94103, USA

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Abstract

In a series of licit and illicit drug-related deaths, qualitative and quantitative analyses on extracts of adipose tissue and skin were performed by GC/MS. In all cases, the adipose tissue was found to contain drugs at concentrations lower than, approximately equal to, or even greater than the concentrations of the same analytes found in the blood, which may reflect a consequence of long-term chronic exposure, or acute intoxication, or some combination of both. Approximately one cubic inch of skin with adipose tissue was removed from the mid to lower abdominal region adjacent to the midline incision during autopsy. The drugs were recovered from the specimens following incubation and alkaline, acidic, and alkaline chloroform back extraction of one to three grams of tissue. Deuterated analogs of the analytes were added to the matrix at the beginning of the incubation period. Cocaine and free morphine (from heroin) were readily identified in several cases. The presence of these illicit drugs in adipose tissue raises significant forensic questions, especially the use of 'sweat patches' to monitor recent cocaine or heroin use in chronic drug users.

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1982 research shows that while PCP ingested by mice is initially found in the stomach, liver and intestines, trace quantities were found in fat at 24 hrs. after ingestion and in the liver and lungs for up to 14 days. But PCP metabolites were found in fat at 7, 14 and 21 days. By the 21st day, PCP could only be detected in fatty tissue.

ABSTRACT:

DRUG METABOLISM AND DISPOSITION

Long-term disposition of phencyclidine in mice

BR Martin

The disposition of 3H-phencyclidine (PCP), as well as total metabolites, was studied in mice up to 21 days after either iv or po administration. Thirty minutes after either iv or po administration the highest concentrations of 3H-PCP were found in stomach. The next highest levels were in fat (iv), liver (po), and intestines (po) and the lowest levels were found in brain and plasma (iv and po). Twenty- four hours later, the levels of 3H-PCP in all tissues were less than 2% of the concentrations after 30 min. After 3 days, the only detectable levels were in fat, and were less than 1% of the 30-min levels. Trace quantities of 3H-PCP were detected in fat at 7, 14, and 21 days. The disposition of total metabolites differed from that of 3H-PCP in that total metabolite levels were highest in stomach, liver, and intestines 30 min after administration of 3H-PCP by both routes. After 24 hr the concentration of total metabolites in all tissues far exceeded that of 3H-PCP. The highest concentration of metabolites remained in liver, stomach, and intestines for 24 hr, but after 3 days the levels in stomach and intestines fell considerably. Metabolite levels were sustained in lung and liver up to 14 days and in lung up to 21 days. Mice were also treated with seven daily gavages of 3H-PCP to determine the extent of 3H-PCP and metabolite accumulation. 3H-PCP was found only in fat 7, 14, and 21 days after the last treatment, but these levels were quite low. Metabolite levels in lung and liver at all time points were 5-10 times greater than those following acute treatment. 3H-PCP does not appear to be sequestered to an appreciable extent in any tissue in mice, whereas metabolites do accumulate in lung and liver for long periods of time.

Volume 10, Issue 2, pp. 189-193, 03/01/1982
Copyright © 1982 by American Society for Pharmacology and Experimental Therapeutics

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This is a report of a legal case in which it was shown that the offender committed the act while under the impact of a cannabis-related flash-back. The offender had consumed cannabis two weeks prior to the act. "A plasmatic detection was realized and showed a level at 6 ng/mL, thirty minutes after the beginning of the flashback. This confirms the confirms the clinical entity of cannabis flashback and gives an exceptional indication on THC book concentration at the time of the relapse."

Cannabis-related flash-back, a medico-legal case

Autor(es): G Niveau

Idioma: Francés

Fecha: 19-04-2002

Revista: L'Encephale (0013-7006)

Entrega: Encephale. 2002; 28(1):77-9

Abstract:

Cannabis is a psychoactive drug more and more widely consumed in industrialized countries and in the world. Amongst the numerous effects it can induce, flashback phenomena have been scientifically recognized only since the 70's. This case regards a young man who offended a friend without any objective reason. The report of the forensic psychiatrist demonstrated that the

offense was committed under the influence of a cannabis flashback. The last time the offender had consummed cannabis, probably from Netherland, was two weeks before the acts. A plasmatic detection was realized and showed a level at 6 ng/mL, thirty minutes after the beginning of the flashback. This case confirms the clinical entity of cannabis flashback and gives an exceptional indication on THC blood concentration at the time of the relapse. But the pharmacokinetics of the phenomenon are largely unknown and long term studies concerning the metabolism, not only of THC but also of its metabolites, are needful. On the forensic standpoint, the possible participation of flashback phenomena must not be neglected when grounds of unexplained accidents or crimes are searched.

Copyright:L'Encephale
Institut Universitaire de Médecine Légale, avenue de Champel 9, 1211 Geneve 4, Switzerland. **Full Text:***Sin enlaces a texto completo* **Temas:**Adulto, Defensa Por Insania, Habito del Fumante de Marihuana, humans, Masculino, Recuerdo Mental, Sindrome de Abstinencia a Sustancias, Tetrahidrocanabinol, Violencia

http://www.galenicom.com/medline/article/11963347/au:Niveau+G

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A MEDICAL PROFILE : Brain and Body Pollution
Zane R. Gard, M.D., E. Jean Brown, PHN, BSN, Giovanna DeSanti-Medina
Copyright 1983 Zane R. Gard MD.
“Toxic Bio-Accumulation and Effective Detoxification”

> After 30 years of research, a medically managed detoxification program was developed to lower body levels of psychoactive drugs and to reduce the restimulative effects of drugs and other toxins. Today, the medically managed “Bio-Toxic Reduction Program is the only detoxification technique evidenced in current nutritional, medical, and biochemical literature which releases stored impurities from body reserves with complete proven safety. With therapeutic doses of vitamins, minerals, and oils, in conjunction with exercise and dry sauna heat, stored toxic residue are mobilized from the fatty tissue. Released toxins are then eliminated from the body by perspiration in the sauna and through the intestinal tract following daily doses of oil which the body exchanges for contaminated fat). Because the oil is not absorbed into the intestine, the contaminants exit the body via fecal elimination and bile excretion. The precisely calculated protocol ensures that the recirculating toxins are flushed out of the system and to avoid re-entry into the bloodstream. For this reason, participants must complete the entire program. Close specialized medical supervision is required at all times.
> …
> Though the detox process does not “cure” specific symptomatology nor any particular disease entity, numerous scientific research projects and clinical cases clearly demonstrate the possibility of many general health improvements which may be other-wise unattainable without the reduction of bodily stored chemical residue.
> …
> Research studies conducted by Dr. David Schnare, Ph.D., policy analyst for the U.S. Environmental Protection Agency, concluded that the individuals evaluated had

experienced up to a 97% reduction of toxic levels through this procedure, and often continued to detoxify as long as four months following the program.

…

Numerous case histories illustrate a high success rate for individuals completing the program who were previously disabled following acute or chronic chemical exposures. These patient profiles involving either significant reduction or total elimination of "fat stored" toxins have demonstrated various health improvements. A brief description of cases having completed the detox program include Vietnam veterans and other victims recovering from the effects of exposure to Agent Orange; police officers disabled after being sprayed with PCP who resumed full employment status; lupus patient who regained immune response and joint motion; a paraplegic gaining improved muscle strength; asthmatics with elevated stored toxic levels, now void of measurable toxins and taken off medications; employees affected by the "sick building syndrome" as a result of poorly ventilated buildings (particularly new offices or those routinely sprayed with pesticides); residents recovering from chronic illness due to a toxic spill or living near landfills; individuals whose responses to medication ranged from paralysis and dyspnea to violent behavior now able to live "normal" lives after reducing stored levels of pharmaceutical drugs; health was restored in a young child poisoned by sugar purchased in a supermarket which was laced with numerous deadly pesticides; and many successful cases involving recovery from illness resulting from employer's failure to supply adequate safety precautions for workers exposed to hazardous materials.

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Neuropsychological deficits in long-term frequent cannabis users

NEUROLOGY2006;66:737–739
Lambros Messinis, PhD; Anthoula Kyprianidou, BSc; Sonia Malefaki, PhD;
and Panagiotis Papathanasopoulos, MD, PhD

ABSTRACT

The authors examined neuropsychological functioning in 20 long- term (LT), 20 shorter term (ST) heavy frequent cannabis users, and 24 controls after abstinence for 24 hours prior to testing. LT users performed significantly worse on verbal memory and psychomotor speed. LT and ST users had a higher proportion of deficits on verbal fluency, verbal memory, attention, and psychomotorspeed. Specific cognitive domains appear to deteriorate with increasing years of heavy frequent cannabis use.

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