



Is Detoxification A Solution To Occupational Health Hazards?

By Dr. Max Ben

With more than 55,000 chemicals now in commercial use, some 3,000 deliberately added to food, and more than 700 found in common drinking water, there is no arguing the importance of protecting workers and their families from potentially hazardous substances.

But, the question of *how* to resolve the problems that have developed as a result of man's interaction with his chemical environment has brought a variety of responses.

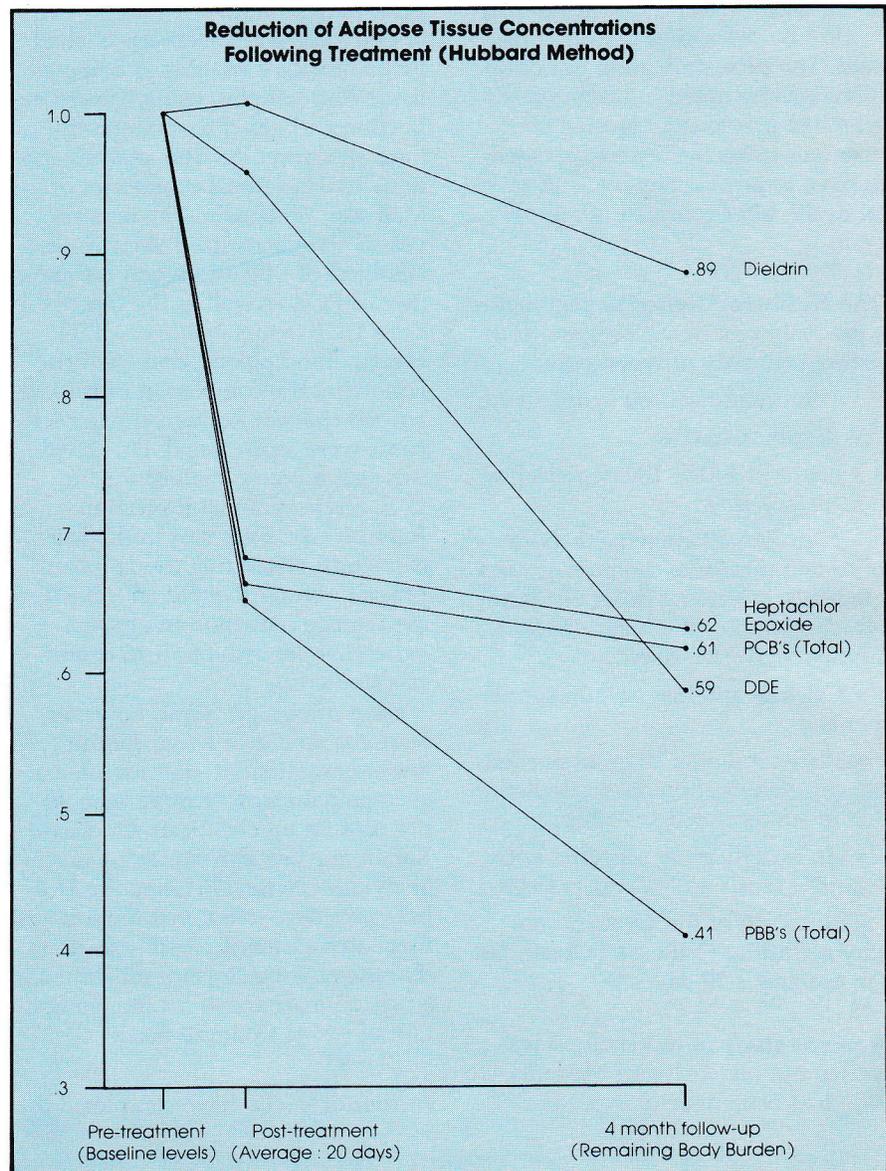
There is no question that some of the chemicals have adverse human health effects. Scientific research in recent years has shown a relationship between the presence of foreign chemicals in human tissue and an increased rate of cancer in those same tissues. Studies have also shown that so-called "halogenated hydrocarbons," such as the industrial coolant PCBs (polychlorinated biphenyls), may have a significant effect upon the human immunological system. It is this system that routinely protects us against everything from colds to, perhaps, cancer.

There are, undoubtedly, other undefinable risks associated with bodily accumulation and storage of a variety of toxins—a process known as toxic bio-accumulation.

Whereas an amazingly large amount of effort has gone into attempting to determine the health effects of chemical exposure, appallingly little has gone into examining how to remove safely those chemicals that do find their way into human tissues. It may not be economically or technologically possible on an immediate basis to guarantee

workers complete protection from the risks posed by chemical exposure, much less ban every known hazardous chemical from use. But, it

would seem that finding a means of reducing the accumulated load of foreign chemicals in humans may be the most reasonable approach.



Part of this research delay is no doubt due to the fact that many scientists and physicians have long considered it impossible to remove some chemical substances that have become lodged in bodily tissues.

Some 48 distinct chemicals have been identified in human fat tissues, each one of which has known negative health effects in humans or animals. The normal expectation was that such substances would remain locked within the body for the duration of one's life.

Recent preliminary studies of toxic bio-accumulation and means of reducing accumulated chemical residues, however, have proven quite promising. For the past few years, researchers for the Foundation for Advancements in Science and Education, at Los Angeles, have been studying the *Hubbard Method* of detoxification—a technique developed in 1978 by researcher L. Ron Hubbard. The procedure arose out of observations he noted in individuals who had previously ingested toxic materials subjectively and appeared to have improved physical and mental health after completing a program.

The Hubbard Method or regimen is a precisely monitored program consisting primarily of seven parts:

- Polyunsaturated oil supplement;
- Aerobic exercise;
- Sauna at 140 to 180 degrees F to induce sweating;
- Nutritional supplements (vitamins and minerals) centered around gradually increasing doses of niacin, which promotes the release of toxic substances from tissues;
- Calcium and magnesium supplements;
- Water and salts taken as needed to avert dehydration or salt depletion due to concentrated sweating;
- An orderly daily schedule with balanced meals and adequate sleep.

The length of the program may vary according to the participant, but the average is 20 days.

A recent study of this method was carried out on Michigan residents who had been heavily exposed to

the fire-retardant chemical, PBB (polybrominated biphenyl), in the early 1970s. The fire-retardant was accidentally substituted in place of a nutritional supplement for farm animals. The contamination of meat, milk, and a variety of other foods resulted in the ingestion of the chemical by virtually the entire population of Michigan—a tragedy detailed in the book (and subsequent TV movie) *Bitter Harvest*.

In the Michigan study, participants were first extensively tested to determine the levels of PBB, PCBs, and other toxic substances in their bodies. (Studies have already established that it takes 10 to 20 years or more for the stored residues of these chemicals to be reduced naturally by one-half.) Thus, the participants were self-controlled against their own baseline levels of contaminants as established prior to treatment.

The toxic levels were established by quantitative analysis of adipose tissue (fat) samples, using solvent extraction and gas chromatography/mass spectrometry. The analysis was done by Hazleton Laboratories of Madison, Wisconsin. The tests revealed six metabolized variants (metabolites) of PBB and seven metabolites of PCB, as well as the insecticides DDE (a metabolite of DDT), Heptachlor, Epoxide, and Dieldrin. Following the completion of the prescribed *Hubbard Regimen*, the participants were again tested. Dr. David Schnare, a policy analyst for the U. S. Environmental Protection Agency, who took part in the Michigan study, stated that the Hubbard program brought about an immediate average reduction in approximately 20 per cent of all 16 chemicals studied.

Even more significant, however, were the results of a four-month follow-up examination that revealed an average reduction of more than 40 per cent for all chemicals. Dr. David Katzin, medical director at a Los Angeles clinic, which delivers the Hubbard program, stated that the follow-up analysis "might possibly indicate that the *Hubbard Regimen* rehabilitates a natural mechanism for the elimination of toxins from the body."

Individuals who have completed the

Hubbard Regimen program in Michigan and elsewhere have expressed relief from a variety of exposure-related maladies, including problems related to prior use of "street" drugs and even open sores, apparently stemming from the Vietnam defoliant, Agent Orange.

While efforts to remove toxic substances from the environment must certainly be continued, steps must also be taken to eliminate the potential health hazards facing those exposed to such toxins. In a recent essay,* Dr. Schnare emphasizes that now is the time to take advantage of approaches to reducing the biologically accumulated load of foreign chemicals in humans. "Work on the unpolluting of man must catch up and pass the polluting of man," writes Dr. Schnare.

Given the fact that more than 20 million Americans work with chemicals known to be toxic to the nervous system and other parts of the body, the potential benefits of detoxification techniques such as that developed by Hubbard are immense.

If, as the *Hubbard Regimen* seems to indicate, chemical toxins can be removed safely and effectively from the body, then it may be possible to resolve the entire problem of human contamination and chemically related disease. Ω

* Schnare, Dr. David, "The Unpolluting of Man." Copies of this essay are available from the Foundation for Advancements in Science and Education, Box 29813, Los Angeles 90029.



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