

## **CRITICAL ANALYSIS OF THE PURIFICATION RUNDOWN** **by David Hogg, M.D.**

This analysis will only cover some of the statements Hubbard puts forward concerning certain aspects of biochemistry and medicine. Many of his other statements I consider fallacious or even mendacious, but they will not be subjected to criticism here.

### **1. LSD**

Hubbard makes many statements concerning this drug, all of which serve to illustrate his overwhelming ignorance of biochemistry.

"As it has been stated that it only takes one millionth of an ounce of LSD to produce a drugged condition and because it is basically wheat rust which simply cuts off circulation, my original thinking on this over the years was that LSD sticks around in the body. That basically is the idea underlying the original Sweat Program. The remedy given was to sweat it out. From the most recent research developments, it now appears that not only LSD but other chemical poisons and toxins, preservatives, pesticides, etc., as well as medical drugs and the long list of heavy street drugs... can lodge in the tissues and remain in the body for years."

Firstly, LSD is a chemical. It is thought to act by a direct effect on brain cells, perhaps by blocking the action of a neurotransmitter (a chemical messenger in the brain) known as Serotonin. this blockade may affect the brain adversely, causing the various hallucinogenic effects of the drug.

Hubbard claims that LSD "cuts off circulation". In fact, it does nothing of the sort; neither the output of blood from the heart nor its passage through any of the blood vessels in the body is affected. LSD affects only the brain, not the circulation.

Wheat rust is a virus which causes an infection of wheat; it has absolutely nothing in common with LSD either chemically or biologically. How Hubbard ever made the connection between the two is very puzzling; the fact that the two are linked together at all is evidence of his poor understanding of the subject.

There is no evidence at all that LSD or any of the other street drugs Hubbard mentions "lodge in the tissues for years". Indeed, these drugs, being water soluble, are excreted quickly. This is due to the fact that the body is mainly water. The drugs dissolve in the water and then are rapidly excreted from the body in the urine. (In view of this, Hubbard's claim that "trips during the program" (p.15) should be treated with "extra vitamin B complex and vitamin C" is seen to be false; you can't treat what isn't there.)

### **2. Fats and Oils**

The only substances which Hubbard lists correctly as being stored in the tissues are pesticides. However, Hubbard has no idea how this occurs. He states:

"There is no such thing as a fat cell" (p.8)

This is incorrect. Hubbard might have merely consulted a basic medical text to realize this. The human body, like any complex living organism, is composed of cells. In the body, these cells are specialized for various functions; nerve cells, which relay messages to and from the brain; red blood cells, which carry oxygen to the body; and so on. The body stores fat in specialized fat cells. Hubbard, although claiming a good deal of knowledge of biology, does not even appreciate this very basic concept.

Hubbard then claims that to "clean up" fat tissue in the body, it is necessary to replace the fat broken down by exercise with an external source of oil. He is wrong on several counts.

Firstly, the body contains none of the street drugs stored in body tissues as Hubbard claims. The only exception to this is the active ingredient of marijuana; it may be stored in fat cells for as long as one to two months before it is finally excreted. It is not, as Hubbard claims, stored for years. LSD crystals do not exist at all in the body. Thus the "drug residues" which Hubbard bases most of his program on, simply do not exist.

Secondly, in order to rid the body of these drugs and toxins, Hubbard proposes to break down body fat. In the short term, this would actually increase the toxicity of such substances as pesticides because they would be released into the bloodstream as fat is broken down. The only instance of this occurring is in several species of birds exposed to DDT during the summer. In the winter, as the birds used up their body fat due to the lack of food, many died due to DDT poisoning. Fortunately, the levels of such substances are not high enough in the human population to cause such an effect; nonetheless, Hubbard's method of "cleansing" is certainly not medically sound.

Finally, Hubbard states that oil should be consumed to provide more fat to replace that which is broken down. In fact, oil is not necessary to make fat; the body may synthesize fat perfectly naturally from carbohydrates instead, as is evidenced by the number of obese candy lovers.

### **3. Vitamin Deficiencies**

Hubbard's complete lack of medical knowledge is best demonstrated here.

Some introductory comments first. Hubbard states that alcohol "burns up" vitamin B1 and thus leads to the DTs. This is incorrect. Alcohol itself causes, in sufficient dose and following withdrawal, a clinical syndrome known as delirium tremens or the DTs. This syndrome is due to a sudden lack of alcohol in an addict of this drug; it is best characterized as a severe alcohol withdrawal reaction. Many alcoholics eat poorly and thus become deficient in thiamin or vitamin B1. They do not burn up this vitamin, they simply run out of it. They develop a neuralgic syndrome known as Wernicke-Korsakoff disease which will not be discussed here but which is much different from the DTs.

Following this, Hubbard claims that LSD and other street drugs burn up several vitamins. There is no evidence that this occurs. No vitamin deficiencies are due to a toxic effect of street drugs; what actually occurs is that many addicts eat very poorly and thus fail to consume the proper amount of vitamins. Deficiencies of these vitamins then develop, not due to the drugs themselves, but rather to the social situations which they create. The solution obviously lies in a discontinuation of the drug taking behavior and resumption of a proper diet.

### **4. Niacin**

Hubbard devotes special attention to this vitamin and makes many statements concerning it, almost all of which are incorrect.

He first claims it "releases L.S.D. crystals into the system". As discussed earlier, there are no LSD crystals stored at all in the body anyway so this statement concerning this effect of niacin is incorrect.

Next, he states that, "Niacin's biochemical reaction is my own private, personal discovery". In fact, niacin was discovered about the turn of the century and its lack, which leads to a syndrome known as pellagra, was elucidated in the early 1900's. Niacin's action, as an important constituent in many of the body's chemical reactions, has been studied since that

time by several notable biochemists; Hubbard is not among them. He has made no contribution to the field, has published no work pertaining to the substance and his claim that niacin is a "private personal discovery" is a total lie.

When given as a medication, Niacin may cause a direct effect on blood vessels of the skin causing them to dilate. This will be seen clinically as in itching, flushing sensation which passes quickly. Hubbard claims however that it is really "running out" sunburn or radiation. This is simply ridiculous; radiation, be it sunlight or otherwise, is not stored in the body as a chemical substance is, but is simply converted to some other sort of energy such as heat, or causes some tissue damage (i.e. sunburn). (Try catching a glass of sunlight!) It cannot therefore be "run out."

Niacin in the body is converted to a substance known as nicotinamide (tradename Niacinamide). Hubbard claims that this compound is worthless. He is incorrect again; in fact, nicotinamide given as a drug simply obviates the body's need to convert niacin to nicotinamide, and avoids the side effects of niacin.

It is of historical note that no one received a Nobel prize in 1973 for "curing insanity with niacin", as Hubbard claims.

## **5. Medical Risks of the Program**

Hubbard attempts to cover himself as concerns the risks of the program by stating that:

"This program can be strenuous and should not be undertaken by anyone who has a weak heart or who is anemic."

His methods of clinical investigation, however, are highly questionable both medically and legally. He states that the "Medical Officer" who is "trained" may test applicants to the program for these problems. Many years of training are required to detect heart disease in some individuals. The medical officers in the various Orgs have no such training; Hubbard, by implying that they do, is perpetrating a medical fraud which may be highly dangerous to some people engaging in this program. For example, a patient with unsuspected coronary artery disease who is subjected to the stresses demanded of him in this combination of exercise and sauna stands a significant chance of suffering a heart attack.

It should be further noted that Hubbard gives as second choice a qualified medical doctor to check the applicant before embarking on the program; an MD is to be consulted only in the absence of a "medical officer".

Hubbard also states that the dose of niacin, which is given initially at 100mg a day, should be steadily increased. He then states:

"The other vitamins would have to be increased proportionately to Niacin at the same time the Niacin is increased..."

This may be dangerous to the person concerned. Probably most of the vitamins Hubbard recommends are harmless, even if they do none of the things he claims they do. However, vitamins A and D, if taken in large doses, may be quite harmful.

High levels of vitamin D may lead to a sudden increase in blood calcium. This will lead to symptoms of decreased appetite, nausea and vomiting, memory loss, decreased level of consciousness progressing to coma, and in infants, mental retardation. Kidney damage may also occur which is often not reversible on discontinuing the vitamin. Bone disease, with weakening and fractures, also occurs concomitantly.

Large amounts of vitamin A may lead to severe toxicity including a rise in the pressure of the fluid surrounding the brain, leading to headaches, visual disturbances and seizures. Even more worrisome is the fact that in animals, vitamin A leads to malformed offspring when fed to the pregnant mother.

Finally, Hubbard seems to feel that any drugs are dangerous, as he lumps them with street drugs and other poisons in his introductory section. Many people depend on certain drugs to maintain the function of their heart or other vital organs. In the case of these people, an instruction or even suggestion to cease taking their medications could be fatal.

In summary, Hubbard is a very ignorant man. He consistently demonstrates a complete and at times dangerous lack of knowledge concerning biochemistry, physics, and medicine. His theories are based on fallacies and lies; there is no scientific data to support any of them.

Furthermore, his program not only fails to deliver what it promises, but may actually be detrimental to the health of those taking it.

As such, it cannot be recommended that anyone take this program.

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