

Dr. Cooter: moly, oxy

## **Molybdenum**

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At least a decade's worth of personal experimentation had led me to find answers to my own poor health involving chronic fatigue, extreme muscular weakness, generalized pain, insomnia, and other disgusting things. The causes had been variously diagnosed as mononucleosis or Epstein-Barr virus, poor health caused by lack of exercise, lupus, psychosomatic illness, depression, slow pertussis infection, post polio syndrome, faulty brain chemistry, and *Candida albicans* infection.

The chief player in resolving my problems was an essential trace mineral, molybdenum. With molybdenum, it was possible to transform poisons into energy.

In trying to "kill" a massive *Candida* colonialization in my GI track, my mouth, and toenails, I made discoveries. The antibiotic Nystatin had made all of my symptoms worse. First, it must have been responsible for attacking and killing vast numbers of the fungal yeast, *Candida*; and as Orian Truss, *The Missing Diagnosis*, and William Crook, *The Yeast Connection*, had said, large doses of antibiotics can make an "unpleasant condition" worse. Their hypothesis was that the yeast "byproducts" from the kill-off were responsible for chronic pain becoming acute pain.

Neither Truss nor Crook were aware of how the garbage from yeast actually affected the body or the brain. They only knew that sites remote from the infection were affected: the brain, the central nervous system, the joints, the muscles.

In experiencing the effects of the "kill-off," I began to have definite feelings that killing the yeast was wrong. That is how we as a culture respond to anything we don't understand. Ethically speaking, we consider strangers enemies. We go to war with anything that is different. War itself on a political level causes untold human suffering, and the aftermath may be the worst of all. The emotional and economic garbage of war persists for centuries. The debts of the American Civil War are still unpaid. If we learn to cooperate with the strangers on our borders, we would have a different world. If we learned how to treat microbes strange to the human body as guests of the body, we might just discover health.

Molybdenum is one way of cleaning up the garbage of our antibiotic wars. *Candida albicans* is a normal inhabitant of our gastrointestinal tract. It is supposed to be there. And if Dr. Bruce McFarland is correct, it causes no problem when it is fed well and treated well. When does it cause a problem?

Half of the problem is created by modern medical wonder drugs: the birth control pill which alters the hormone system and subsequently the immune system, antibiotics, steroids, and other chemotherapies which are synthetic ways of altering the function of the body's systems, wiping out the ecosystem in the stomach and gut, and setting up a scenario for trouble. As friendly *E. coli*, *E. faecium*, *L. acidophilus* bacteria are killed by the use of prescription drugs right along with the alien microbes, *Candida* fungal yeasts begin to flourish and dominate, growing to such numbers that they may outnumber every cell in the human body.

Two basic events take place. Our friendly bacteria no longer aid digestion by converting food into enzymes, amino acids, vitamins, and minerals that the body can use; so killing sets us up for subclinical and clinical malnutrition syndromes.

The other half of the problem is industrialized, overly processed, heat processed or chemically processed foods. *Candida* and herpes zoster, for two, are junk food junkies thriving on sugar, processed vegetable oils, and hydrogenated fats. None of these refined foods are found in nature. So how does the body respond to hydrogenated fats? One result is that *Candida* digests a part of them into pseudo bile. Pseudo bile tells your appetite center that the fat is taken care of, and you need more. So you develop cravings for more junk as undigested fat collects in the body. Undigested fat collects in the arteries too, and you get artery and heart problems. Another problem of incomplete digestion results in food substances going into the blood that shouldn't be there. Methionine becomes homocysteine rather than glutamine and taurine. We are not allergic to foods; we are allergic to incompletely digested foods.

Candida also converts sugars into ethanol. As a common ingredient in prescription and over-the-counter medications, it is not bad in itself. It functions as a free radical scavenger and antiseptic. It provides a janitorial function for the body. But too much unused alcohol converts into acetaldehyde. If you have adequate amounts of glutamine, selenium, niacin, folic acid, B6, B12, iron, and molybdenum, aldehydes continue to be metabolized into acetic acid, which can be excreted, or converted further into acetyl coenzyme A. If these nutrients are in poor supply, aldehydes begin collecting in the body's tissues.

So when candida is fully nourished or we are, candida furnishes the body with a necessary part of the Krebs energy cycle necessary for the health and maintenance of all cells. When our digestion is unbalanced, we incompletely convert sugars into poisons and they stay poisons in our human systems. When our digestion is balanced, or we give it what it needs in terms of supplements, a potential poison is transformed into a source of energy: aldehyde poison becomes acetyl coenzyme A.

Why should we love our enemies? Because our enemies are ourselves. The enemy candida, and it is an enemy in Drs. Truss's and Crook's eyes, and in the eyes of most of the medical profession, is our friend or becomes our friend when we treat it right. If we attack it with antibiotics, the rest of our friendly microbes will be unable to feed it the B vitamins, amino acids, and minerals it needs to metabolize its poisons into nourishment for our bodies. When we attack our microbes, we kill ourselves.

Karl Humiston, retired M.D. and psychiatrist, said we feel guilt in our stomachs because Adam ate the apple. Those of us who are healthy feel guilt, and we feel it inside our stomachs. On a metaphorical level, I think the Adam story works the other way around. Adam ate the apple because that is where we should feel guilt and transform it, and we must digest that guilt if it is to transform itself into a positive source of energy for living. As Dr. Humiston has demonstrated in his work with reforming convicted felons, a felon must learn to own up to his own feelings, to possess them, to take them in. Rapists feel nothing. They have no stomach voices. Why? They learned long before to disconnect themselves from their feelings. They project their feelings onto others. Like Adam projecting his guilt onto Eve, or Eve onto Satan, that gets us nowhere. The way I see it, feelings are considered enemies to be projected onto something else when we are sick. But once we emotional criminals "take our feelings in" and notice where we sense them in our bodies, the urges that drive us to commit crimes stop.

The emotional poisons we have disowned become a source of our own health. We stop blaming the Japanese for our automobile industry problems and start figuring out how employing people allows them to have the money to buy cars. A poisonous chemical or feeling can be transformed into a helpful ally when it is paid attention to, treated right, owned up to, known, or fully digested or understood.

Within days of taking 100 mcg of molybdenum three times a day, I could feel the poisons from candida garbage transforming themselves into heat and energy. Where I had experienced pain in my neck and shoulders, I felt warmth. A stiff back that felt like a wall of steel was transformed into copious sweat. My muscles relaxed and were pain free. At the same time, the person I was who found it difficult to get out of bed, became someone who needed 4 to 8 hours of sleep rather than 10 or 12. Where I had been confined within a prison of fatigue, the fatigue was translated into an open expanse of energy and possibility. An intellectual fog that had filled my head for years scattered itself the first day I took molybdenum. I had lived with an intellectual hangover for so long, I had no idea what it was like to experience full mental clarity.

I was grateful for the result and hoped that it might work for others who shared my problems. Then, in talking with a nutrient supplement company about doing a study with other people who had either post polio syndrome (650,000 people in the United States have been diagnosed with the problem), or others who shared the same symptoms, I had an opportunity to design a study to my liking. I called it a Self-Help Molybdenum study.

In reading histories of placebo treatments, it became obvious to me that "scientific" studies attempted to avoid the placebo effect that, on average, reported a 30.6% rate of effectiveness, slightly greater effectiveness than with the "real thing" prescription medication it would be paired against. Typical of some studies was the bemoaning of the fact that placebo effects were not maximized. That is, health professionals who had the best interests of the patients in mind wanted to use positive suggestion in addition to the medication. However, few if any of such professionals, had the courage to do it. Why? It was unscientific. Wouldn't it be terrible if people got better because of attitude change?

In other readings, it became apparent that lactose, sugar, or olive oil were commonly used as placebos. In view of my modest knowledge of biochemistry, this seemed outrageous to me. Lactose, sugar, and olive oil are all bioactive

substances. Lactose, for one, is so little regarded as a nutrient, that it is the most common binder in prescription medication. Yet the Food Pharmacy made clear that plain old sugar acts as nature's tranquilizer. Dr. Richard Murray has pointed out that lactose contains the two essential building blocks, glucose and galactose, of the central nervous system and brain. The body converts adequate supplies of glucose into N-acetyl glucosamine, essential for all tissue building and repair. Olive oil is known to favorably affect good cholesterol, and good cholesterol is the nutrient precursor for our hormones and essential for the digestion of fats. It seemed no wonder to me that placebo effects could be accounted for not on the basis of expectation alone, but on a biochemical level. To me, this meant that most double or single blind experiments were triple blind. Nutrients like vitamin B12 and folic acid are so little regarded that they have been used as placebos in the treatment of multiple sclerosis. The greatest irony of all was not that placebos may have worked better than the prescription medication, but that the prescription medication may have done some of its good because of the binder hiding inside of it. All of this led me away from the mechanistic attitudes that were behind "scientific credibility."

We are humans who deserve to know what the hopes are of those who intend to help us. We are not chemical machines. So I decided to declare what I knew about molybdenum, what effects had been noticed by Walter Schmitt, Jr., D.C., in "Molybdenum for Candida albicans patients and other conditions," and what the positive, even miraculous results were that I had experienced. My view was and is that the name of the game is doing what is helpful in as positive and cheerful way as possible. If positive expectation is helpful, use it. So I maximized rather than minimized the so-called placebo effect and wished everyone choosing to participate a similar success.

In order to assess subjective improvements, I used a scale of 1 to 10, the lowest number indicating that a symptom was never a problem and 10 indicating that it was always a problem. People choosing to participate filled out a symptom chart before beginning the study, and once again after completing 30 days of chewing or sucking on a 100 mcg tablet three times a day. The people choosing to participate all shared symptoms of chronic fatigue, chronic muscle weakness, joint pain, muscle pain, headaches, concentration problems, memory problems, problems with depression, and insomnia. Participants ranged in age from 36 to 84. The average age was 54, 13 men and 18 women. Out of the 46 people who agreed to participate, 31 completed the study. The 15 non participants discontinued the study for various reasons: in one case, the diary of symptom changes arrived but the molybdenum had been lost in the mail. I presume that a postal clerk somewhere is slightly less mineral deficient than before. A woman with a panic disorder panicked and didn't start the study; a man with memory problems forgot to take the mineral, etc.

Despite the problems, gratifying results took place for about 2/3's of the people who did try the supplement. I had hoped for better.

### **Changes in Chronic Fatigue**

65% reported improved energy levels  
10% reported lower energy levels at the end of the study  
25% reported no change

Of those who responded positively or negatively, there was a 28% average gain in energy.

The metabolic pathway that diagrams the likely cause is--

Threonine or Ethanol--} aldehyde--} acetic acid--} acetyl coenzyme A.

A toxin, acetaldehyde, can be transformed into a source of energy, acetyl coenzyme A provided there is adequate molybdenum in the diet or through supplement form. One 84-year-old woman had such low energy levels that she simply couldn't get going in the morning. At 10 AM, she had chewed on one tablet, then cleaned her house for the first time in 5 years, went shopping in the afternoon, worked in the garden, and was still going strong late at night. Since she called up one participant on the survey to complain that old women shouldn't have that kind of energy, I then heard about it second hand. She took only 1/4 of a tablet thereafter. Three other participants for similar reasons did the same thing. To me, that was success. For them, I guess they were more comfortable with their customary levels of fatigue. I enjoyed having new energy. Others were frightened by it. Others were disappointed in having less dramatic gains, but most did experience gains.

### **Changes in Chronic Weakness**

68% reported improved strength  
10% reported that weakness became worse  
22% reported no change in strength

Of those showing a response, a 24% general improvement took place. One 74-year-old woman reported being able to climb stairs that she had been unable to climb after about two weeks of the supplement. Another reported being able to stand up from a seated position without using his arms to push off. Others had less dramatic changes.

### **Changes in Joint Pain**

61% reported slight to dramatic improvements  
6% reported getting worse  
32% reported no change

One 67-year-old post polio survivor had been disappointed that nothing miraculous had happened during the first two weeks of supplementation. Then, in the third week, she experienced a pleasant "red hot" warmth where she had had intense sharp pain before in her hip. Only two people seemed to notice a rapid change from pain to pleasant heat.

### **Changes in Muscle Pain**

61% reported less pain to being pain free  
29% reported no change  
10% reported feeling worse

Any detoxification process may result in reruns of old problems. Ten of the people in the study experienced the brief return of old rashes, old allergic responses, itching, acne like redness and pimples on the face, brief recapitulations of ear aches, and migraines. In asking Dr. Schmitt for his explanation of rashes, his opinion was that excessive copper was working itself out of the system, excess copper being one of the normal clinical findings for people with candida infections.

Another theoretical explanation occurred to me. It is known that mercury collects at sites of physical or chemical injury. My feeling was that aldehydes and ammonia may do the same thing. On one level, aldehydes, known as fragrances, may be responsible for giving a chemical signal to foreign microbes or to our own immune system. Aldehydes may suggest that a chemical-decay process is taking place, so that the immune system may rush to the site to clean up the mess. This may account for what Dr. Schmitt has elsewhere called psuedoinfection triggered by excessive free radicals. Providing a mineral that starts a new chemical reaction may reactivate old problems temporarily.

### **Changes in Headaches**

55% of the people reported fewer or lesser headaches  
13% reported more headaches  
32% reported no change

One 46-year-old woman, who rarely drank red wine because it gave her whanging headaches, reported that a glass of red wine no longer had that effect. Sulfur containing amino acids, sulfites, are used as a preservative in wines, salad bars, and fresh vegetables at grocery stores. Molybdenum, as Dr. Schmitt has pointed out, helps convert potentially harmful sulfites into taurine, a beneficial amino acid. Drs. Chaitow and Treinen have pointed out that glutamine assists in this process, metabolizing toxic accumulations of ammonia, byproducts of our cellular metabolism, and allowing them to be excreted out of our cells. You then have a brain working at a full, healthy capacity.

### **Changes in Mental Concentration**

65% of the participants reported improvements  
3% reported getting worse

32% reported no change

Unexpected and unnoticed by me was something very important to four people on the study. All four noticed a kind of emotional clear-headedness in addition to gains in concentration. One of the four said that her feelings were very close to the surface where she could get to them rather than her feelings getting to her. Rather than let a grocery clerk intimidate her, she stood up for herself and the issue was resolved. Two reported an emotional even temperedness where small annoyances were no longer life and death threatening situations. Another who feared social interaction reported actually enjoying and looking forward to being with people.

Mark Johnson has said that candida in some unknown way was known to be responsible for all kinds of neurotransmitter disruptions. I have a strong suspicion that aldehydes and ammonia accumulations cause those mental and emotional dysfunctions by fouling the chemical communication process.

### **Changes in Memory**

71% reported improvements in ability to remember

No person reported getting worse

29% reported noticing no change

Autopsies of post polio survivors who died in the 1950's were reexamined by Richard Bruno, Ph.D. Looking at the brain rather than the already noted damage to the myelin sheath and frayed nerve endings to muscles, Dr. Bruno noticed pinholes Swiss-cheesing the hypothalamus. His assumption was that the original polio infection had caused brain damage which was responsible for the post polio syndrome. I suspect that another explanation is more likely. As aldehydes slowly collect in the brain from auto exhaust, carpets, glue, wood amalgams, candida infection and are not metabolized, a fair guess would be that an autoimmune system attack is triggered by the rancidity of the aldehyde smell. Of some surprise to Drs. Henzi and Schwyzer of Switzerland was finding formaldehyde in the myelin sheaths of MS survivors.

The damage caused by many chronic diseases may just be triggered by unmetabolized aldehydes and ammonia toxicity. Dr. Henzi's success with folic acid and B12 placebos even suggests why. Sulfur containing amino acids become ammonia and remain ammonia without adequate folic acid, B12, and molybdenum

### **Changes in Depression**

55% reported improvement in mood

3% reported a worsening of depression

42% reported no change

Of those responding to molybdenum, an overall 23% improvement was reported in symptoms. One woman who had used Xanax for years during PMS mood swings and pain, reported that she no longer felt the need to use it. One other subject to PMS stress reported absolutely no PMS symptoms during the month she used molybdenum. The PMS connection was a totally unexpected result. Of course, most of the women were beyond the age where that may have been a problem.

### **Changes in Insomnia**

61% reported improved sleeping patterns

10% reported increased insomnia

29% reported no change

Of those responding in this area, an average 20% improvement in sleep was reported. It might be that aldehydes and ammonia toxins foul serotonin, tryptophan, and B6 metabolism. B6 is one of the many forms that serotonin changes into, and B6 is necessary for metabolizing aldehydes. If there were a B6 deficiency, aldehydes would accumulate, and serotonin levels would be impaired, thus causing poor sleep and other neurotransmitter disruptions.

I believe that other studies with many chronic conditions, self help and physician sponsored, should be done with molybdenum, selenium, glutamine, chromium, vanadium, B6, folic acid, iron, and B12. Diet and alcoholism studies are

among them. Four people reported intense craving for sugar at the beginning of the study, but nausea when sugar was consumed towards the end. Excessive candida presence may dictate cravings in diet; reduced candida garbage may alter such cravings, including the craving for alcohol.

The same people reported weight losses from 4 to eight pounds, and in two cases, the loss of two inches around the waist and neck. Molybdenum is known to play a role in fat, carbohydrate, and protein metabolism. Molybdenum sufficiency may be a chief player in transforming metabolic toxins in our bodies into sources of restful sleep and vitality at the same time it reduces the waistline. Rather than strangle in our own environmental and cellular waste, humble nutrients may help us recycle our garbage and turn it into energy for our cells.

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#### Disclaimer/caveat:

I'm not a medical doctor but a health journalist. I don't give medical advice. I'm an independent researcher who does research in the hope of finding health answers for myself that may possibly help other people. That means I think for myself rather than only rely on what authorities say. That's also what I believe others should do, think for themselves, giving due respect to others. I belong to a group of health professionals where I'm the only consumer represented. Their mission statement is: "To help people overcome the fear of thinking for themselves by promoting the empowering belief that the individual's intuitions and observations have as much importance as the wellness professional's knowledge and skills." However, one person's red herring is another person's dinner, another's food allergy, another person's solution. My opinions are based on my life experience and my research. Your life experience may differ.