YOU TELL THEM: IT'S IN THEIR HEAD DR. JAMES SCALA, Ph.D.

Detoxification

MIKE'S STORY

"I worked a lot with Agent Orange in Vietnam. Sure, the instructions said not to get it on your body or your clothes, but there wasn't any protective clothing around." Mike continued, "The instructions also said to wash your clothes immediately after working with Agent Orange and shower thoroughly. You work with the stuff and it wasn't always possible to shower. Heck, we'd just go eat. We'd usually go several days between showers and got accustomed to wearing the same work clothes for several days before we could get them washed." He laughed. "Heck, we were young, it was Vietnam, and we were happy to be alive."

During that time Mike recalls getting a serious rash around his joints. "It was like bad case of prickly heat and I'd get it severely on my elbows or under my arms. But," as Mike put it, "you show me someone who has been in the army or marines who didn't get a rash." I can't argue with Mike's logic. Most people who do a tour of military duty get at least one rash. Given the heat and humidity in Vietnam, a rash was a common occurrence.

People often ask me about toxins in the body. Even though the concept of toxins in the body is probably as old as our ability to reason, it's difficult to be specific when answering these questions. In the human body, a major function of the gall bladder, kidneys, and intestinal tract is the removal of wastes. It is known that if some wastes accumulate, they can soon cause illness and later death. Even research has shown that women who are chronically constipated are more likely to get breast cancer. Some experts suspect that breast cancer results from the byproducts of estrogen metabolism. Therefore, it seems conceptually realistic that bowel regularity helps rid the body of these by-products. Detoxification seems like a good word to describe this elimination.

Animal studies with deadly toxins, such as the carbolines, food dyes, and other materials, support the concept of detoxification. For example, in animal studies pioneered by Dr. Benjamin Ershoff of the University of Southern California, noxious materials were either fed or injected into the peritoneal cavity of these animals. Following these injections, the animals could be detoxified by diuretics, laxatives, and dietary fiber.

A third line of detoxification evidence comes from methods used in many hospitals and clinics all over the world. Dialysis, a procedure that keeps thousands of people alive in the United States alone, is a process that takes over for the kidneys and removes toxins from the blood. Consider the process of chelation, which is routinely used to trap toxic metals, such as lead, mercury, and aluminum in the blood, so they can be removed either by dialysis or the kidneys.

Detoxification is a process that is both necessary and clinically valuable, yet discussions about it are often perplexing. People speak vaguely of rashes and wastes and are too indecisive and unspecific to be helpful scientifically. However, when I came across Mike's story, I could put things together and they all made sense. Mike's story deals with several issues that I

hope you find as interesting as I did. First, I need to give you a little more background information.

AGENT ORANGE

Agent Orange is a very powerful herbicide that was used in large quantities by our armed forces in Vietnam to defoliate the leaves from large areas of jungle vegetation. Military experts believed that by clearing foliage, the Vietcong could not hide from our planes. In my opinion, a defoliant constitutes one aspect of chemical warfare, even if the chemical wasn't directly applied to people. If Agent Orange inadvertently destroyed the enemy's crops, it was clearly chemical warfare, because it deprived noncombatants of food.

United States' troops who serviced apparatus on the planes that sprayed the herbicide, came in contact with Agent Orange. Whether or not they used correct safety precautions to prevent personal contact is not an issue here. Many of them routinely came in contact with Agent Orange accidentally because of inadequate safety gear, carelessness, sloppiness, or just because there was a lot of it around. Many of these men had health troubles after the war and a large number of them developed unusual symptoms, including cancer. Their children had an abnormal number of birth defects. Although statistics are hard to find, enough people had these problems to attract attention. A general's son who had worked with Agent Orange, developed cancer from which he died. The general was so racked with guilt, that he devoted his life to fighting the system to get funds to compensate these afflicted veterans.

Debate continues over whether or not these diverse symptoms and deaths were caused by Agent Orange. Some experts argue that Agent Orange was not unequivocally proven to be the cause, even though the circumstantial evidence is compelling. Statistical analysis, as it often does, leaves room for further searching and doesn't give a definite end to the debate.

One study that impressed me compared military dogs used in the Korean War to those used in the Vietnam War. This study left no doubt that the Vietnam dogs suffered from more cancer and other chemically-caused illnesses than the Korean dogs. Perhaps, in a world where the politics of human clinical studies are so strong, and statistical analyses are so equivocal, these animal findings will be our best evidence.

With that as background, allow me to tell you a very touching story about detoxification. It brings out the plight of many Vietnam veterans who had contact with Agent Orange and puts the stories you've heard into the lives of two real American people and their families. Mike's story about detoxification is one of the most optimistic Shaklee stories I have ever heard.

BACK TO MIKE

After the army, Mike put his education to work and became an employee of the state social-services system. After a few years in that position, he answered a calling to enter the ministry. Mike became a preacher. Anyone who has heard Mike speak, quickly spots two characteristics: Mike is devoutly religious and has an ability to make himself understood without being overbearing. Consequently, his calling to the Lord's work benefits many people.

Mike retained most of the weight he had gained while in the service and decided it was time to go on a diet. "I followed Dr. Atkin's diet because everyone was using it at the time and it seemed to have a lot of promise. I found it easy to count my

carbohydrates every day and still eat the things I liked. I lost 70 pounds and looked great." Mike was close to his youthful "fighting" weight, but the only fight that took place was inside his body.

"I started having headaches that would hang on for several days. The headaches weren't bad enough to put me in bed, but I never felt right. They were always there. I started noticing a bad taste in my mouth. It was a sort of foul taste like I just woke up and hadn't brushed my teeth. The taste lingered. I could drink something like a soft drink and the taste would clear, but in an hour it was back again. When the blackouts started, I got scared." Mike described his illness with a detachment, as if he was describing someone else. His ministry is one of total optimism, so he naturally tends to see a bright side to everything.

While the headaches, blackouts, and foul taste dominated his senses, the rash from Vietnam came back. It was like prickly heat multiplied a hundred times and it wouldn't stop. The skin around every joint was especially bad. The rash got so terrible under his arms and on his elbows, that the skin cracked and oozed blood. His clothes would take on a red tinge around the elbow, arm pit, and knee areas. Only one course of action was available to him.

Mike went into a Veteran's Administration (VA) Hospital. When the doctors realized how bad he was, they admitted him and kept him for a full month. Test after test was taken and many of them Mike didn't even know existed. The doctors couldn't find any specific illness. This made things even worse, because medicine is based on specifics. One doctor worked with Agent Orange vets and told Mike that the excess fat he carried around on his body was loaded with Agent Orange. The doctors reasoned that by losing so much weight, he put large amounts of Agent Orange into his blood all at once and it overloaded his system. A lot of systems just went awry. For example, he was tasting Agent Orange. The doctors reasoned that the Dr. Atkin's diet caused his blood sugar problem.

Mike's blood sugar was so high that the doctors tried insulin, even though his pancreas was working. The insulin only made things worse, so they dropped that approach. Bringing his blood sugar down didn't stop either the headaches or blackouts, as the doctors had hoped for. Mike's response to their well-intentioned tests probably led the doctors to take the Agent Orange hypothesis more seriously.

Two things the VA doctors thought they could control were a chronic staph infection and the rashes. Wrong on both counts. Antibiotics knocked the staph down, but not out. Creams and ointments, if anything, made the rash worse. Mike was one sick man and he didn't respond to the doctors' treatment at all.

Doctors in the VA hospital admitted defeat with Mike's case and proposed a very generous, alternate approach: "We'll bring you into the VA hospital system as a long-term patient. You'll receive all pay and allowances according to your permanent discharge rank. This will provide you and your family with an income. We'll send you to Walter Reed Army Hospital where you'll receive the expert care and attention you require." There was nothing else they could do.

This generous gesture to help a man, who was desperately ill, is testimony to the VA medical system. The doctors added one more thought to help Mike see things their way: "You're only 35. We don't believe you'll live to see 40 at the rate you're going."

Mike couldn't give up his ministry, nor could he leave his wife and four children. His wife Debby followed the controversy over Agent Orange in the newspapers, magazines, and on television. She decided that nutrition would help solve Mike's problem. She knew he had to get his weight down, so she tried various diets, all based on good nutrition.

All of the diets produced the same result. "As soon as I started losing weight, the blackouts, rash, foul taste, headaches, and nausea started with a vengeance." I don't want you to get the idea that Mike and the family ate poorly. Debby had done a thorough job. They ate good, wholesome food. Even a dietitian couldn't find fault with their menus.

Mike's health problems started about seven years after he was discharged from Vietnam. During that time they had three girls and a boy. Mike joked: "Don't feel sorry for my son. The girls loved him because he was the baby and the only boy. He had it made." During this time Mike had gone from the state social services to a ministry in Florida and then on to another ministry in North Carolina where he had grown up. He conducted his ministry with a constant headache, a lingering rash, and occasional blackouts.

If all this wasn't enough, he had a mild heart attack What he thought was more indigestion, VA doctors determined was a heart attack. Although it was mild, he was left with some scar tissue. The doctors also concluded that he had developed a heart valve problem. All he could do was live with it as best he could.

Most people would say, "lose weight and these problems will clear up." He tried that, but the headaches, foul taste, blackouts, and chronic rash all came back ferociously. He was used to the headaches, but the other problems were unbearable, so he just went along with things.

Mike had been to a clinic in Chicago and was getting ready to drive up again for intensive treatment. Debby had been after him to take nutrition more seriously, so she gave him a tape to play while driving to the clinic. "I don't remember who spoke on the tape. It was a woman who sounded so convincing about good nutrition, that I made a U-turn and went back to the house. I told Debby that we'll make nutrition work."

Doctors in the Chicago clinic were understanding when he called and canceled. They told Mike to return to the VA hospital and have blood tests taken so they could monitor his progress correctly. Mike recognized the wisdom of this advice, so the next morning he checked into the VA hospital as an outpatient for complete blood work.

Mike's blood work didn't paint a very nice picture. His blood sugar was 510 against a normal of about 110; cholesterol was 298 against a normal of 180 for his age; and his triglycerides were 490 against a high normal of 150. The results didn't place him at "death's door," but he wasn't very far away. With his physical data, resting pulse of 95, and blood pressure of 150 over 110, he had to accept the "grim reaper" as a close companion.

Debby had a great plan for him. It included a balanced, low-calorie diet, and Shaklee products. "I dove into those Shaklee products with determination," Mike said, and continued. "I took lots of everything: Vita-Lea, Vita-C, Vita-E, Zinc, Formula I, and lots of B-Complex. I had a serving of Instant Protein three times a day; that was my meals. I took eight Herb-Lax every day. If five were enough for an average person, I figured eight would just do it for me." Mike also used garlic

and an acidophilus supplement which the doctor had recommended previously.

"I didn't feel better all the time. I noticed a cycle. Every three days I'd wake up feeling great: no headache, lots of energy, no foul taste, and the air felt clean in my lungs. On the other days, I still felt poor and had the foul taste. In about three weeks this cycle stopped and I felt good all the time. I noticed the rash was getting smaller." Mike continued the program, which included taking lots of supplements.

In this early period, the cracked skin under his arms and around his elbows cleared. Everyone he met commented on how good he looked. After the first month, as agreed, he reported to the VA hospital for his blood work.

His resting pulse was 65 and blood pressure was 122 over 72. A new, young doctor was on duty at the hospital and had Mike's folder open as he looked at his one-month blood chemistries: cholesterol 143, triglycerides 152, blood sugar 160. The doctor suspected mistakes had been made, possibly even a mix-up of blood samples.

"Would you stay overnight and let me repeat your blood work?" A diplomatic way of him saying that there had been a mistake; these results were flukes. Mike agreed. He was feeling good and was confident his results weren't a fluke in the system. The new doctor took his blood and sent it to a private lab for faster analysis. The second analysis confirmed the first month's results. All the numbers were within analytical tolerances. The results were solid.

Mike says, "I could see excitement in the eyes of the doctor. He had a special interest in Agent Orange cases and wanted to follow my case. Every month was the same. The young doctor became so excited, that he would almost jump for joy with the results." Unfortunately, this doctor was transferred and Mike didn't see him again.

After six months, Mike was 62 pounds lighter and weighed 235 pounds. Even for a big man, 235 pounds is still big. His total cholesterol was 132 and his HDL cholesterol was 48. This yields a risk ratio of less than three, which is excellent at any age. Triglycerides of 86, yielding an LDL cholesterol index of 67, is good even for a teenager! A blood sugar of 154 was the lowest it had ever been in his entire life. Mike was the picture of health. Physical data included a resting pulse of 62 and blood pressure of 110 over 65. The staph infection was gone, and each other test from the blood analysis was comfortably within normal range.

VA doctors posed another request. "In view of your history and the mild heart attack, we'd like to do a stress test followed by an echocardiograph." An echocardiograph is a way of looking at a heart with sound waves. In the hands of an expert, an echocardiograph is like watching a heart work as if it was in a glass case, open to view. Mike agreed to both tests. He was on a crusade to prove that good nutrition could defeat any health problem.

His stress test on the treadmill was excellent. He got his heart rate to 189 against his maximum of 195. He couldn't quite reach the maximum in the time allocated. After the normal cool-down period, his vital signs, heart rate, blood pressure, and so on, returned to normal within ten minutes, just as it should.

Next came the echocardiograph. It showed a normal working heart and only an experienced expert could spot the slight scar left by his heart attack. The doctors summarized

Mike's progress in two simply beautiful words: "You're healthy!"

In view of Mike's progress and continued program, the doctors followed up in another six months. Dull. Everything was normal to excellent. He had lost more weight and was getting close to his 200-pound target. He had added years to his life and life to his years.

Mike continues following his Shaklee program of Instant Protein, Vita-Lea, B-Complex, and the other supplements. He now takes Herb-Lax more moderately when he needs to, and no longer tells Herb-Lax jokes when he speaks. Mike is just a normal, gifted man who spreads God's word through his ministry.

MIKE'S DAUGHTER

Elizabeth's Story

"We always called Elizabeth our little "spice of life," Mike said. "She sang in church even before she could read the words, was the perennial optimist, and friendly to everyone." Elizabeth has smooth, Irish skin with freckles. Her red hair would make her look like a native on any Belfast street. When Elizabeth became quiet and stopped smiling, Debby and Mike became concerned. Since all children have ups and downs, they didn't worry until she started walking funny. She kind of slouched her shoulders. Later, when her ordeal was over, her parents asked her why she didn't tell them she hurt. Her reply was logical: "Dad, with all your troubles and going to hospitals, I just couldn't give you another problem."

In reviewing Elizabeth's condition, a doctor and chiropractor came to the same conclusion: "It's a stage she's in and she'll just grow out of it." So Mike and Debby went along with their conclusions until one night when Elizabeth couldn't climb out of a bathtub. This wasn't any "stage" for a six-year-old.

Trips to local doctors turned up a big nothing. But "chance favors the mind that's prepared," and by chance, a medical missionary friend of Mike's was passing through town. She examined Elizabeth and believed she felt an abnormal growth on her spine. She told Mike and Debby to get her to a bone specialist quickly.

A bone specialist examined Elizabeth's spine and put her in the hospital that very day. The doctor said, "It's not negotiable, she goes in now!" The orthopedic specialist called on a pediatrician and oncologist for support. They strongly suspected cancer. After some debate with the pediatrician, Elizabeth was transferred to another hospital attached to a medical school where the doctors had more experience with childhood cancer. Little Elizabeth was put in a ward for terminal cases.

Elizabeth was given a CAT scan that showed the tumor was extensive and had injured her fifth vertebrate. Subsequently, she was put to sleep for the tumor surgery which lasted three hours. Mike and Debby waited for the verdict. Both the neurologist and oncologist had long faces when they came into the waiting room. "We've sent a biopsy to the lab and want to prepare you for the worst. It doesn't look good, but we'll know tomorrow morning after the pathologists examine the biopsy."

That night Mike prayed for the Lord to be quick with Elizabeth. He asked for her suffering to stop. At nine in the morning, the doctors came into her room beaming, "It's not malignant." Mike knelt down and prayed thanks to the Lord

right there with a room full of people. He also prayed for the doctors.

Elizabeth didn't need any chemotherapy or radiation. The doctors wanted her to go home, rest, and try to rebuild her strength. What remained of the tumor would localize and surgery could be postponed for several years, at least. At worst, after more surgery, they felt Elizabeth might require a brace because of the bad vertebrate. But one step at a time, and getting her strength back was the present plan.

"We put Elizabeth on so much beta carotene her skin turned orange. We gave her calcium-magnesium and even Vita-Cal in hopes her bones would make up their loss from the tumor." Besides taking calcium and beta carotene, she also took the normal supplements.

At the first month follow-up, the doctors were delighted with Elizabeth's progress. Her back muscles were lining up nicely and she was generally healthy; the second follow-up visit was set for three months later.

At the next follow-up visit, a new doctor examined her, because the original attending physician took a new position in a Wisconsin hospital. After a routine examination, he had Elizabeth touch her toes so he could examine the tone of each vertebrate by hand, one at a time. He looked at Mike and asked, "Which one was the problem? Was it five or seven?" The doctor couldn't tell if either one had been bad. That was all Mike needed to hear. She was cured!

What happened after that visit is history. Elizabeth's spine cleared up completely. The doctor has no plans for surgery and sees no need for braces. An annual checkup is necessary as a normal, routine procedure. Elizabeth is on the books as "cured."

IS IT IN MIKE'S HEAD?

No, of course not. Mike's story is typical of men, especially those who were overweight, worked with Agent Orange, and didn't take enough precautions. Some were much worse than Mike. In contrast, other men who worked with Agent Orange had no reaction at all. Mike's weight worked against him. So long as he put weight on, the Agent Orange had a reservoir for itself and didn't spill out into his blood. His downfall was the first diet he followed, the Atkin's diet, that mobilizes fat very rapidly, because it causes a precipitative drop in carbohydrate reserves.

A low-carbohydrate diet forces the body to burn fat rapidly. With most of us that's the desired result, but for Mike, this type of diet released lots of the toxin into his blood. The doctor had it right the first time when he suspected the Atkin's diet of causing his blood sugar problem and releasing the Agent Orange from his fat deposits. The doctors were also correct when they said a low carbohydrate diet is hard on the pancreas. That particular type of diet definitely belongs in a skillful doctors hands.

When Mike followed a good diet with lots of protein and nutrients, he was helping keep his metabolism normal. The Herb-Lax and fiber helped rid his system of all the toxins that were also probably getting into his intestines through his gall bladder.

Mike's three day cycle of feeling poor, then great, is not surprising, as it probably related to the use of carbohydrate reserves with water loss. Rebuilding these reserves takes about three days while fat is burned. Once he reduced his body fat content and achieved a higher lean-body-mass ratio, he got rid of the Agent Orange. From then on, the toxin was gone and his

body was normal. His blood chemistry and physical signs proved this point.

ELIZABETH'S CASE

In contrast to Mike's story, Elizabeth's story is speculative. There is circumstantial evidence that children of Agent Orange victims have had a higher portion of tumors and bone problems. Only extensive research will ever get to the bottom of the controversy, but there's a lot of support.

Elizabeth's tumor and related spinal problem could have been a defect resulting from Mike's exposure to Agent Orange. Recent research has shown that some birth defects are often traced to the sperm. In the past, the assumption was made that these problems came through the ovary of the mother. The facts say otherwise. Statistical analysis shows that environmental factors, such as Agent Orange, are the causes. It's reasonable that it took six years for the tumor to reach a size that could effect Elizabeth's spine. The slow growth-rate of the tumor is also consistent with other findings.

Mike and Elizabeth's success came from good nutrition coupled with good medical care. Debby deserves recognition for providing a good basic diet. Good diet, supplemented with Shaklee products, gave each body the support it needed to rebuild.

A few research papers have shown that beta carotene helps to shrink tumors. Some experts have shown that the body produces a very small amount of retinoic acid from the beta carotene. They then speculated that retinoic acid is responsible for the tumor shrinkage. Obviously, more research is required for a definitive answer. For now, chalk up one more observation that favors super nutrition.

ABOUT THE AUTHOR

James Scala was educated at Columbia (B.A.), Cornell (Ph.D.), and Harvard (Post-doctoral studies) Universities.

He has spent his career in research, research management, and teaching. His accomplishments include over fifty published papers on research in nutrition, biochemistry, and biology. His teaching includes courses for undergraduate, graduate, medical, and dental school students.

As a research manager, Dr. Scala held positions at Procter and Gamble, Owens-Illinois, Unilever, General Foods, and was the Senior Vice-President of Scientific Affairs for the Shaklee Corporation. He now devotes his energies to writing and speaking for the general public.

Dr. Scala lives with his wife Nancy in Lafayette, California. For recreation, they sail the ketch La Scala from its home port on San Francisco Bay.