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

Multiple Sclerosis

TODD'S STORY

"I was holding two jobs. We were saving money so we could buy a house and start our family." Todd was very energetic and didn't seem to tire, but every once in awhile his leg would seem to drag a little. He told himself that he needed more rest

Rest didn't help and soon both his right arm and leg dragged. You would have thought that Todd was crippled or had had a stroke. Barb, his wife, took him to the hospital.

From that day on their life would never be the same. Many tests were done in the hospital. Doctors took blood, urine, x-rays, and magnetic imaging, which was a new technique in 1985. All this was followed by a spinal tap and a pronouncement: "Mike, you have multiple sclerosis. Judging from its progress, we believe you have had MS, as everyone calls it, for just over five years." The doctor, though gentle and understanding, was firm. He didn't mince words and explained that every test confirmed the diagnosis and there was no other possibility that he or anyone on the staff could offer. He told Todd that MS is progressive and would continue to develop and get worse as he got older. The medical approach is to try and get the MS to go into remission—become dormant— so you can continue with your life as well as possible. The doctor was very honest and clear, but held no hope for a cure; only for long periods of remission, at best.

WHAT IS MULTIPLE SCLEROSIS?

Multiple sclerosis means multiple scars, which in MS, appear on the nerves. The disease was discovered by a doctor who autopsied a woman who had unusual and diverse symptoms, which included all those that Mike had had, and more. She had kidney failure, bowel dysfunction, breathing difficulty, and other problems. The doctor found that her nerves had many scars; hence, the name, multiple sclerosis.

MS is an insidious disease that usually strikes between the ages of 20 and 40, although it is occasionally diagnosed around the age of 15. I say "insidious," because it develops slowly and without pain. Early symptoms are so minor that the victim usually isn't aware of anything wrong, much less that they have MS, until the disease has advanced. For example, the doctors concluded that Todd had MS for five years or more before its symptoms became obvious. His symptoms of fatigue and a dragging leg were typical.

MS is an inflammatory autoimmune-disease which attacks the central nervous system. That's a mouthful and I'll try and simplify it for you. Autoimmune means that the body's immune system treats some tissue as if it was a foreign invader and attacks it as if it was a threat. The tissue that is attacked—in MS it's nerve tissue—usually becomes inflamed. This is obvious in a disease like arthritis, but with MS, the inflammation goes unnoticed with the possible exception of minor neuropathy. Neuropathy is a loss of sensation in surface areas around the mouth or on the hands. To the victim, the feeling might seem like a slight tingling and is often ignored.

You might be wondering what causes the body's immune system to attack its own nerve tissue. There are no firm answers, but a pretty good hypothesis has developed from research. I'll take you through it so you'll see the tragedy of this terrible disease a little better.

Statistics show that MS prevails in temperate climates, such as the United States, at the rate of about 1 in 2,000 people compared to the Tropics, where 1 in 10,000 people get the disease. It favors women slightly over men, and seems to be slightly higher in some families. This slight edge to women and families doesn't mean it's inherited, because a virus seems to be involved. The climate distribution suggests more environmental factors that aren't clear at this time. However, it could be that the virus doesn't survive in warm climates.

Most experts suspect that a viral infection occurs many years before the symptoms and the virus either becomes dormant in nerve tissues or grows very slowly. This is based on the clear finding that people with MS have antibodies (immune factors) to viruses such as measles.

At some point in life the virus becomes active. Then to protect itself from the virus, the tissue—in MS it's the nerve tissue—becomes inflamed. Once the tissue is inflamed, the immune system dispatches cells which are supposed to attack the virus. For unknown reasons, these cells attack the body's own tissue, possibly attacking the virus at the same time. Perhaps it's a case of the good guys getting hit along with the bad guys.

In MS, the sheath around the nerve cells, the myelin sheath, is the specific tissue that's attacked. Think of the nerve as an electrical wire and the myelin sheath as the insulation around the electric wire. From experience, you know that serious problems, even disasters occur when insulation breaks down on the wires in your home or car. Well, it's the same in your body. You don't get fires and sparks in your body, but systems, such as kidneys, eyes, muscles, and other organs or tissue where nerves are important, break down. For example, the result of kidney failure can be death.

For a moment, I want to review what the hypothesis teaches about MS. First, the distribution of the disease means it's favored by cooler weather. The slight edge for women and families suggests there's a somewhat heightened susceptibility, but it's not as pronounced as an inflammatory disease like rheumatoid arthritis. This suggests a very slight predisposition, possibly to the virus.

Since MS fits some patterns of inflammatory diseases, we would expect stress, diet, fatigue, and nutrition to have a role in its development. Similar to other inflammatory diseases, we'd expect it to flare up and then enter periods of remission. MS can't be cured; all the victim can hope for is a long remission.

A flare-up leaves a scar on the nerve tissues that were attacked. Once enough scars have developed, you might lose most function in an organ or tissue. Historically, MS was called "creeping paralysis," because people with the disease would slowly lose the use of their legs or arms. MS victims often experience double vision, so the disease also affects the optic nerve and brain. Sometimes the sensory nerves are effected, so a part of your body might go numb. This is similar to having novocaine for dental work and then experiencing a "numb" mouth area.

With this as a background, let's trace Todd's experience and see how this disease emerges and how nutrition can help.

TODD NEEDS TWO CANES

Once released from the hospital, Todd needed two canes to walk. Here was a young man that had held two jobs; now he couldn't hold one and needed two canes just to get around. It was very depressing. He was put on a steroid regimen to help suppress the disease and get it into a dormant state. This meant constant constipation and regular discomfort.

Todd went to a cancer clinic that devoted some of its facilities to MS, with the objective of helping people cope with their illness. At the clinic he learned how to eat, so he would get enough fiber to stop the constipation. He was told to use food supplements to boost the nutrition his body needed. Most important, he met and commiserated with other MS victims at the clinic, and one person suggested he use Shaklee products.

After returning home, he used supplements from health-food stores and followed the dietary plan. His MS didn't get worse, but he still needed two canes to get around and he suffered with constant fatigue. He went to bed tired and woke up tired. After months of frustration, he decided to try Shaklee. He began with Vita-Lea, Instant Protein, Vita-E and a few other supplements. In a few days Todd noticed that he woke up feeling rested. He concluded that the Instant Protein did what people said: it gave him more energy, so he started taking it two times a day. Within nine months, he chucked the canes and decided to follow his plan for an education.

Once he had been diagnosed with MS, Todd decided he needed an education, so he applied to Purdue University for a grant. Though they didn't say the MS kept him out, they said: "Don't call us; we'll call you if we think there's a way you could get around." The call never came, but now he could walk into the administrative offices without canes and with the same vitality and energy everyone else had. He got the grant. Todd is now a college man who happens to have MS.

Todd is the first one to tell you he uses lots of supplements—Vita-Lea, Vita-E, B-Complex, and others. His twice daily standby is Instant Protein. For a man who needed two canes to just walk, he regularly drops the kids off on his way to school and pursues a twelve-hour day. His classes often mean lugging books up five flights of stairs. No problem. Evenings are spent sharing his nutrition knowledge at Shaklee meetings. This translates to carrying projectors, props, and displays. It's not unusual for him and Barb to return home after 11:00 p.m., but he's up again early the next morning to drop the kids on his way to school.

One of Todd's greatest rewards came from the silent joy he felt watching an embrace. It went like this. Todd speaks to MS support-groups about the value of good nutrition. Some people listen and some don't. For one couple, the disease had progressed to where they required wheelchairs, but they got married anyhow. After hearing Todd speak, they started the nutrition program that he followed. The special reward came one day when he saw this couple stand up in front of their wheelchairs to embrace. After the embrace, their conversation went like this: "Are you holding on?" "No, are you?" "No." They both cried. It was the first time they had kissed each other standing unassisted. No big deal for normal folks, but for them, it was a milestone that defies description.

Although Todd's experience with MS is typical, his was a mild, uncomplicated case compared to Janet's experience.

JANET'S STORY

"I couldn't see!" My mother took me to the eye doctor who hospitalized me immediately and called in a neurologist. The neurologist confirmed the eye-doctor's suspicion. Janet had MS. Married just two and a half years, 23-years-old, and she had a chronic illness that temporally blinded her.

Once the MS went into remission, her vision returned. She went to a Catholic clinic in Tacoma, Washington where you learn to live with MS. What an experience. She saw MS in all its forms. There were people who couldn't walk or talk, some had kidney failure, and others couldn't even breathe. This taught Janet that any organ tissue and body function was fair game for MS. She made a vow: "It won't happen to me!"

Janet averaged two attacks each year; one around Christmas and the other at vacation time. MS attacks are precipitated by stress. It would take Janet about six months to recover from the attack, but each time the recovery restored a little less of the function that was affected. She was always left with a loss.

In spite of being told no children, she and her husband had a son six years after marriage. But the attacks continued and she developed a system of living. Janet learned how to ask others to help. Her husband did the grocery shopping, and her niece, whom they raised, did the housework.

A wheelchair was used whenever they went out. The wheelchair made it easier for other people. At home she used a cane. If a flare-up came, she learned to relax. She would get to bed and let her body heal itself.

Fatigue was her constant companion. This fatigue is called being "medically tired." Sleep doesn't change the feeling. Most people work hard, go to bed tired, and wake up refreshed. With MS you go to bed tired and wake up tired. It's like always dragging a dead weight—your body! Going out for an evening was a major ordeal. It meant resting the entire day. Then, the day after the outing was totally given over to rest.

A friend suggested she take Shaklee vitamins. She had read somewhere that vitamin E helps soften scar tissue, so she decided that would be the supplement to use. Her husband knew a man at work who sold Shaklee, so he picked some up for her. Janet then decided to read Adell Davis' book in which three-whole-pages were devoted to MS.

She started taking more supplements in addition to vitamin E: Vita-Lea, Vita-C, Instant Protein, and a few others. Nutrition is slow-motion medicine, and although the effects were accumulating, she was the last to notice.

Friends who hadn't seen her in a long time said, "Janet, you look great. What are you doing?- Her husband wouldn't ask, "Are you too tired?" when someone suggested they stay for another round of bridge. Then one day she realized she was climbing stairs without a cane, like an adult and not a child.

Perhaps her greatest experience was a shopping trip. She went to a mall without a cane and not in a wheelchair, shopped for three hours, and left for home not feeling exhausted. She wasn't dragging a dead body anymore.

She started a Shaklee business to share her new health with others. In 5 years she had three, short flare-ups and hasn't had any for the past 15 years. On reflection, she realizes that the flare-ups occurred when she let her nutrition program fall.

Her nutrition program includes: Instant Protein, Vita-Lea, B-Complex, Vita-C, Vita-E, Beta Carotene, Alfalfa, and Calcium. Janet also uses one or two Herb-Lax daily to keep her regularity.

She describes herself as an MS sufferer in recovery. Janet realizes the disease is there waiting to flare up if she lets her guard down.

CAROL'S STORY

I met Carol while speaking in Canada. She remarked that she has MS, but was saved by nutrition. I asked her to tell me her story. It is very much like Janet's and Todd's story, with a major exception. Carol's kidneys stopped working.

She said, "I could tolerate the wheelchair and the canes, but a month on dialysis twice a week and I considered letting God have me." Then some friends suggested she start a nutrition program. At first her doctor balked at the idea, but then relented and said, "You can't get worse."

Carol took Vita-Lea, Instant Protein, Vita-E, and VitaC. Within a couple of weeks, about 10 percent of her kidney function reappeared. This wasn't expected. She persisted and after another month she was off dialysis. Within six months she didn't require a wheelchair. She still uses a cane, and for long sessions out she'll go in a wheelchair, so she can get around faster. It's just more practical.

Carol's story of fatigue is right out of the book, with one exception. She said it like this. "It's not just physical fatigue, it's also mental. You reach a point where you don't care about living. The only reason you go on is because your body won't die."

IS THIS IN THEIR HEADS?

Did Todd, Janet, and Carol experience mind over disease? No, but the support of an optimistic group around them helped. MS is a terrible disease. When a nerve is attacked it can either block a motor function like walking, a kidney function, a sensory function like vision or feeling, or a combination of these functions. That's real. It can be measured.

Medical fatigue is real, not imagined. It results from the incredible stress on the body, that an attack on the nervous system precipitates. Just because you sleep, the attack doesn't stop. Three processes are constantly taking place. The body is being attacked; it's trying to defend itself; and it's trying to repair its systems. When a nerve fails in one part of the body, it effects the entire system.

Chronic fatigue, a constant symptom of MS, is a clue that there's a common denominator to it all. The body is fighting under constant stress to repair a vital system. This fight calls for big-league nourishment with all the nutrients. No one knows what the requirements are for a person with MS. Suffice to say, just getting the RDA of nutrients can't possibly be enough. Besides, each person is as different as they look and as the systems that MS attacks.

WHAT CAN WE LEARN FROM THIS?

MS is one of the most insidious diseases of our time. Science tells us that it has similarities to other autoimmune diseases, and that somewhere a virus seems to remain dormant until it flares up and causes the body to attack its own nervous tissues.

Like other inflammatory diseases, it seems to flare up when the victim is under stress. Stress brings some changes that include a drop in some nutrients, such as vitamin C and some of the B vitamins. But it also brings changes in the immune system. We know this from experience that your mother probably expressed: "You caught a cold because you were rundown."

We also know from research, that in addition to the usual vitamins and minerals, vitamin E is essential to nerve cells. It's an important part of those cells and the myelin sheath, and is essential to their function. This pattern is confirmed by the rare instances where we can study a vitamin-E deficiency. I believe that MS creates an extraordinary need for vitamin E. EPA also falls into the same category.

Protein serves two functions: tissue repair and energy. Instant Protein is uniquely suited for this purpose. So not surprising, when people with MS start the use of protein, they seem to recover more quickly and the fatigue slowly disappears.

Diet can probably help MS. The diet should be low in animal fat, and rich in fish, vegetables and fruit. A diet such as the one I wrote in *The Arthritis Relief Diet* would be prudent. A good supplement program is essential.

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.