

Eczema: Psoriasis

JOSHUA'S STORY

Joshua's mother Pam told me her son's story, which began when he was three-years-old. I'll describe the salient events of what happened, and how Joshua became a normal boy.

Pam's daughter, Kerry, who is about nine years older than Joshua, broke out in a serious rash after receiving her standard immunizations for school, and had to be hospitalized. The doctor thought Kerry had an allergic response to the shots, because the rash, covering about half her body, developed in a few days and lasted just over two weeks. The rash was treated topically and cleared up, so when she was released from the hospital, Kerry's skin had returned to normal. The doctors concluded that she had had an unusual reaction to her immunization shots and they let it go at that. Kerry has never been troubled again.

When Joshua was born he seemed to be troubled with mild, but persistent skin rashes off and on. Recalling Kerry's problem, Pam decided to hold off Joshua's immunizations as long as possible. However, as a three-and-a-half-year-old, he was ready for preschool, and since the system says, "Thou shall have shots," Pam reluctantly went ahead with the immunizations. In her words: "You can't really fight the system and stay sane." Shortly after the shots, she and her husband took a Shaklee cruise as part of their award for having built a business. While they were away, Joshua stayed with his grandparents. During that time, his grandparents noticed that he had been itching and digging at his skin during the night. They were disturbed, because every morning he would wake up covered with scratches and cuts.

When Pam returned, she realized something was seriously wrong. To say Joshua was "scratching and digging" was the understatement of the year. He looked like he had been trying to referee cat fights. Pam immediately took him to see the doctor. Joshua's problem was diagnosed as eczema, an inflammation of the skin which is characterized by redness, edema, oozing, crusting, scaling, and itching. Scratching or rubbing can lead to other problems, such as an infection, that starts when dirt gets into a cut. Eczema is a description of what's going on, but it's not the cause.

The skin is the body's largest organ. It's about 20 percent of the body's weight and has the largest area exposed to all elements. The lungs actually have a larger surface area, but their environmental exposure is both restricted and controlled by the fluid with which their surface is bathed. Besides, the lungs have a system to remove many materials in the air before they get into the lungs, so the skin is the largest freely-exposed organ.

Our skin is a unique organ because it has many functions of its own, but it is greatly influenced by what is going on in the rest of the body. You might observe from personal experience, that when your stomach is upset, your facial color might go from pale white to sickly green. Or if you eat the wrong food, you might develop a rash or "blotches" over various parts of your body that can come and go within a few hours.

Who hasn't had either poison ivy or poison oak or known someone who has had it badly enough to be miserable? The terrible rash and even open sores that can come from exposure to either plant can lay you low for weeks and, in severe cases, for months. How many times has a housewife had a persistent rash, only to learn it came from a beautiful house plant someone gave her as a gift or gesture of friendship. A rash from a house plant is difficult to detect because you may only come in direct contact with the plant once or twice a week when watering it. Consequently, it may take months before the source of the rash is detected.

Other people have had persistent skin rashes, only to learn, after going from doctor to doctor, that it was a kidney disorder or a complicated spleen problem that brought it on. In writing the book *Eating Right For A Bad Gut*, I interviewed a hundred people with Crohn's disease or various types of inflammatory bowel disease, and learned that most intestinal flare-ups are preceded for several days or a week by a mild skin rash. These rashes most often start on the legs, but also begin on the scalp, chest, back, and sometimes in the mouth as mild canker sores.

Some special functions of the skin include protecting your organs from the environment, and regulating body temperature and body water content. The skin is elaborately endowed with a nerve system that senses changes in the environment. To fulfill its roles, the skin has an intricate blood supply, a nervous system that is particularly sensitive, and a system of sweat glands that can release or retain water, as necessary, to keep the body temperature constant. Some nerves in the skin are attached to hairs, so they combine to form a lever system that is extremely sensitive to touch. If you become scared, these hairs will stand straight up and become about ten times as sensitive. You can see how responsive this system is by simply touching a few hairs on your arm.

You can prove how porous your skin is by having someone rub the oil of a crushed garlic clove on the bottom of your foot. You'll soon have a garlic taste in your mouth. If someone eats a lot of garlic or onions, their skin will smell. Similarly, if they smoke regularly, eat lots of carrots or take beta carotene, their skin will change color. This proves you are what you eat or smoke, and your skin discloses what's going on inside your body.

My brief discussion only hints at what this marvelous organ does for us. But it also means that when the skin begins to act up, it can be the result of many things. Skin disorders such as Joshua's experience, can be from something we're eating or touching, a serious disease in some other part of our body, fumes we don't even notice, or even a metabolic disorder. The skin is simply giving an early warning signal of something more serious.

When a child gets a skin disorder it can be exceptionally complicated, because the child can't communicate as effectively with doctors. Consequently, everyone second guesses what's wrong or how the child feels. Joshua's story brings out the extreme frustration connected with a serious skin disorder. In this case, it turned out to be a metabolic problem that nutrition solved.

Most books, many doctors, and people will tell you that a rash is caused by "toxins in the blood." After all, it looks like a severe case of poison ivy or poison oak, which is directly related to toxic substances that get into the blood. But when a

rash persists, the doctor knows it's the result of chemicals produced somewhere in the body that is causing the skin to react. The skin produces pustules, oozes a slime, and a rash develops. All are attempts by the skin to get rid of something toxic.

BACK TO JOSHUA

Pam tried to detoxify Josh by giving him Herb-Lax. She even tried an Herb-Lax poultice on his skin. If anything, Joshua just got worse. This was a clue to her, that whatever was causing the problem wasn't easily eliminated; or that his body was producing something so rapidly, that it was being replaced as fast as it was being eliminated.

It's an understatement to describe Joshua's irritating sensation as "itching." He would scratch and dig all night long. Both parents would take turns watching over him to keep the damage he inflicted on himself to a minimum. Even tying his hands wouldn't stop the process. Let Pam's words give you an idea of how persistent Joshua was to relieve the terrible pain. "If I held his hands so he couldn't scratch, he'd rub his elbows against his sides. His favorite was to rub his knees together because they seemed to be especially bad. His itching and irritation was worse around his joints. It took all my strength one night to pull his legs apart so he couldn't hurt himself." Can you imagine a person, over twice Joshua's size, using all her strength to pull his legs apart?

In retrospect, Pam realizes that most things they tried were like throwing gasoline on a fire. One doctor explained to them that the worst thing you can do for eczema is use "over-the-counter" products that say they are for eczema. When he told her this, she recalled that they had tried all of them and Joshua just got worse. Pam learned that any drug ending in "ane," just made Joshua worse, even though they claimed to relieve eczema.

As parents, we can only guess at the guilt this must have caused for Pam. We all want to do our best for our children and when they're ill, we become very anxious. Indeed, most parents would gladly change places with their sick child, because their love is so deep. So when you learn you've done the wrong thing, you're devastated.

Pam met adults who had similar problems or whose children had eczema. They all gave the same advice: "Stay away from doctors. They just make it worse." Most of them also said it was a nutrition problem. But Pam was using Shaklee products and so was Josh. If it was a simple nutrition problem with vitamins or protein, you couldn't prove it by Josh. No one would ever guess that Joshua's problem was a normal reaction because of something his body couldn't make. In short, it wasn't a toxic chemical being produced. It was a material not being produced. However, Pam's nutritional program probably saved Joshua's life, even if it didn't clear his symptoms.

In defense of the doctors, they had to deal with Joshua's symptoms. As you'll see later, we know now how the problem can be relieved, but in 1984 no one had any idea of an alternate nutritional approach. So it wasn't surprising that people said "stay away from doctors." They reacted this way because the medication appeared to do nothing and the stress of the doctor's office or clinic seemed to make it worse. Good intentions don't count when a child is sick.

Pam went to a chiropractor whose theory taught that Joshua's condition was the result of poor spinal-fluid circulation. The chiropractor tried various manipulations and natural remedies that helped, but produced no cigar. Joshua would appear to be a little better, and then get worse with a vengeance. The improvement from these attempts by the chiropractor probably falls into the category of "mind over matter."

Joshua's skin would ooze so badly that he'd always feel slimy. Since the attacks would come on at night, the bedclothes would be wet with a slime by morning. The sheets and pillowcases required daily washing. As you recall, both parents took turns trying to get Joshua to sleep and prevent him from scratching.

At this point I feel obliged to point out a clue that everyone missed. Pam repeatedly pointed out that the itching would start at night. An internist who is familiar with inflammatory diseases would have immediately realized that Josh was suffering from an inflammatory illness caused by some unknown factor. A careful family history should have revealed that Kerry had exhibited the same symptoms previously.

Joshua's skin was continually flaking and sloughing and became red like he had a bad sunburn. The dead skin would regularly come off in sheets, so Pam would vacuum the living room rug daily to remove the flaked skin. It was amazing how Joshua's recuperative powers were so undaunted; his little body kept going. This certainly was the result of good nutrition.

In hindsight, this incredible skin growth was a second clue to the inflammatory nature of Joshua's problem. However, it was also testimony to Pam's nutrition program for Joshua, which included protein and the generous use of Shaklee supplements. Without this nutrition, his body could never have mounted its reserves to keep fighting. For example, the skin normally reproduces itself every four weeks. In hindsight, Joshua's problem, later correctly diagnosed, indicates his skin was reproducing every four days; a confirmation of his nutrition and the body's restorative powers.

Joshua had a ravenous appetite. Most parents worry about their children eating. Not Pam. Josh couldn't get enough. He would eat several helpings of good food all day long. No wonder his skin could slough off and be replaced at a prodigious rate. Pam's nutrition kept his appetite going and his body working.

During this time Pam marveled at how quickly Joshua's body responded to his condition. He would wake up in the morning raw and red. Skin would flake off all day long, but his body kept fighting. The ooze continued to be produced in large quantities. His body was fighting a fierce battle, but no one could see the enemy.

Although she realized the doctors couldn't do anything, in desperation, she returned to Doctor Moore, the only one who had helped Joshua. The doctor examined Josh again and put his diagnosis in one short sentence: "He's the worst case I've ever seen in my entire career." She asked the doctor to hospitalize him to see if they could stabilize his condition. The answer was a short and sweet, "No. We can't do anything for him in a hospital and he would run the risk of getting a serious infection."

The doctor explained how the family, including Joshua, would have to learn to live with the problem. At about this time, the word psoriasis came up. The doctor saw the clues and was starting to call the condition psoriasis. Joshua would have this for the rest of his life. He did observe that topical cortisone helped and that was about all they could do.

The fact that topical cortisone helped was proof that the skin was producing the ooze. The skin's response to the ointment probably confirmed to the doctor, a dermatologist, that what he observed was inflammation and irritation. But at the time, no one seemed to ask, "What's causing the inflammation?"

One of the things Pam tried giving Joshua was a natural diuretic, that the chiropractor thought would cleanse Josh's cells. The diuretic helped because it removed fluid. A professional massage was the only thing that actually gave Joshua a full night's sleep. Pam reasoned that Josh's little body was racked with stress and tension. Adults relax with a massage, so why not a four-year-old. She was so used to being up with him, that she simply sat up and watched him sleep all night after the massage. Again, this was an important clue; inflammation thrives on stress!

A turning point came by what, in retrospect, seems like God's way of helping people find each other. Pam was invited to speak at a Shaklee meeting in Florida. She decided to go. Her husband had a look of abject fear on his face when she announced her decision. Three days alone with Joshua was tough duty for anyone, even a parent who loved the little guy. It meant no sleep and constant work.

At the Florida meeting, Pam heard someone talk about how EPA helped relieve a skin problem. She got to thinking: "I'll give it a try. It surely can't hurt." Now, you've got to realize that this little boy was taking Instant Protein, Vita-Lea, calcium-magnesium, Vita-C, and other supplements. So, although Pam was tuned into nutrition and believed in it, one more supplement was worth trying, but her skepticism was normal.

She actually had EPA on the shelf at home, but somehow she had associated it with blood cholesterol. Pam had reasoned that the last thing Joshua had to worry about was his cholesterol level. Therefore, she sold EPA to some of her customers, but didn't give any to Joshua.

She gave Joshua three EPA capsules immediately after returning from Florida. This kid was so desperate to help himself, that he chewed the EPA (that was before the fishy taste had been eliminated). Joshua had nerve! Within about one hour, he looked better. Pam gave him two more capsules. The red nodules he had in some places started to disappear. They actually watched them go away. In about a week, they settled on five EPA daily.

Within ten days, Joshua's eczema had cleared up so that he started looking normal. He could begin leading a regular life again. You've got to realize that, by this time, the eczema was so bad, that he couldn't walk properly. Consequently, Joshua had to start some things all over again at the age of four. He returned to little boyhood once more and started over.

After three months on EPA, Joshua's skin was completely cleared. Pam also heard that another essential oil, gamma linolenic acid (GLA), usually obtained in Evening Primrose Oil, also helped. She started Joshua on GLA as well. He

showed even more improvement, so she kept him taking EPA and Evening Primrose Oil.

Final confirmation of his improvement came when she took Joshua back to Doctor Moore, the physician who helped Joshua the most and who also said he would have the problem for life. Doctor Moore said that his skin looked normal and that the psoriasis would always be there, but that it had gone into remission as a result of Pam's effort.

Joshua still has the psoriasis and will always have it, but it's dormant. Sometimes it flares up, and when it does, Pam gives him extra EPA and more GLA. This stops the flare-up and his life returns to normal.

WHAT'S GOING ON HERE?

In 1984 when all this started and EPA was introduced, we didn't know how important EPA could be. However, all hindsight is perfect vision and now I can explain what was going on.

Joshua was probably born with the tendency to have psoriasis, an inflammatory disease, that is a form of arthritis. His older sister Kerry had a similar, mild attack that was also diagnosed as eczema, but prompt steroid treatment stopped her attack and she returned to normal. There's a good chance her eczema was returning to normal by itself. With Joshua, circumstances were much worse.

Stress is a trigger for any inflammatory disease. In Joshua's case, the immunizations, living for a week away from home, and the idea of going to an unknown preschool was a triple whammy of stress for this four-year old. These events got the psoriasis off to a running start. Add scratching, digging, and pain to the stress, and the disease accelerated. This acceleration is often characteristic of inflammatory illnesses. The things people do to relieve the pain often make the illness worse. I think of it as a downward spiral in which everything we do makes it worse.

Steroid injections, such as cortisone, will stop inflammation in adults. However, who's going to give a child with eczema cortisone shots? The side effects of the cure could be worse than the disease. After all, it's the skin we're dealing with and the rash could be the result of something he ate, an allergy, or myriad things. But the fact that topical cortisone creams worked, to some extent, is a clue.

The fact that the chiropractor's diuretic worked indicates that Joshua's body was full of things that kept the irritation going. Also, Joshua's response to the massage, which gave him a restful night, proves how big a role stress and anxiety play in aggravating the inflammation.

Enter EPA and GLA. Are these oils magic? Do they work miracles? Yes, they work miracles in some people, because they restore metabolism to normal. Both oils are converted in the body to prostaglandins that modulate inflammation. Indeed, in 1992, eight years later, both of these oils have been clinically tested in this conversion capacity and proven to be effective.

Our body produces three prostaglandins. One, PGE2, antagonizes or increases inflammation as a defensive mechanism, and two others, PGE1 and PGE3, modulate inflammation. PGE1 is produced from gamma linolenic acid (GLA) and in clinical studies has been proven to modulate inflammation, which is generated internally from what could be loosely called "toxins."

PGE3 is produced from EPA and modulates inflammation by balancing PGE2. In addition, EPA or its metabolic by-products have been clinically tested and shown to be effective in reducing both the severity of psoriasis, as well as other inflammatory illnesses, including arthritis and Crohn's disease, which is an inflammatory disease of the intestinal tract.

PGE1 which antagonizes inflammation, is produced from most fat, especially meat and dairy products. Joshua's mother didn't feed him those foods, so you could ask why he was helped by EPA and GLA.

Although there's much active research in these fields, we know that some people don't make enough GLA, if they make any, but they respond to it very well when it's used as a supplement. In fact, a few diseases are completely cleared by GLA supplements. Clinical studies have proven it helps some people who have arthritis, so it follows that it should help some people who have psoriasis.

Although Joshua had an excellent diet, it didn't contain much EPA. By giving him EPA supplements, his mother pushed his metabolism to make the prostaglandin PGE3 and other materials from EPA, the leukotrienes. Together they balance PGE2 and modulate inflammation. Obviously, Joshua's body simply requires more of these materials than average to "push" his metabolism to make the correct prostaglandins. You could say, "It's in his genes."

IS HE CURED?

Joshua will always have psoriasis, even if it's dormant. His experience with EPA and GLA proves that the nutritional needs of people with these disorders are greater than those for average people. Will the EPA and GLA help the psoriasis remain dormant? Only time will tell. I'm betting it will.

Evening Primrose Oil is a substance that was discovered by the American Indians. Pilgrims of the Plymouth colony sent it back to England where it became known as the "king's cure-all." Indeed, it was one of the few direct economic-benefits to flow from the Plymouth colony to England. It was used for various therapeutic purposes up into the beginning of the 20th century when it was displaced by more sophisticated drugs. GLA is now entering into a renaissance as scientists begin using nutrition more seriously.

GLA is found in mother's milk. This proves it has an important role in infant health and nutrition. However, its only dietary sources are the seeds of obscure fruits, such as black currants, and other seeds of the "borage" plants. Active research on GLA suggests to me that it is an important "conditional" nutrient for many people.

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

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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.