

# Scoliosis

Finding Center  
in a Body Askew



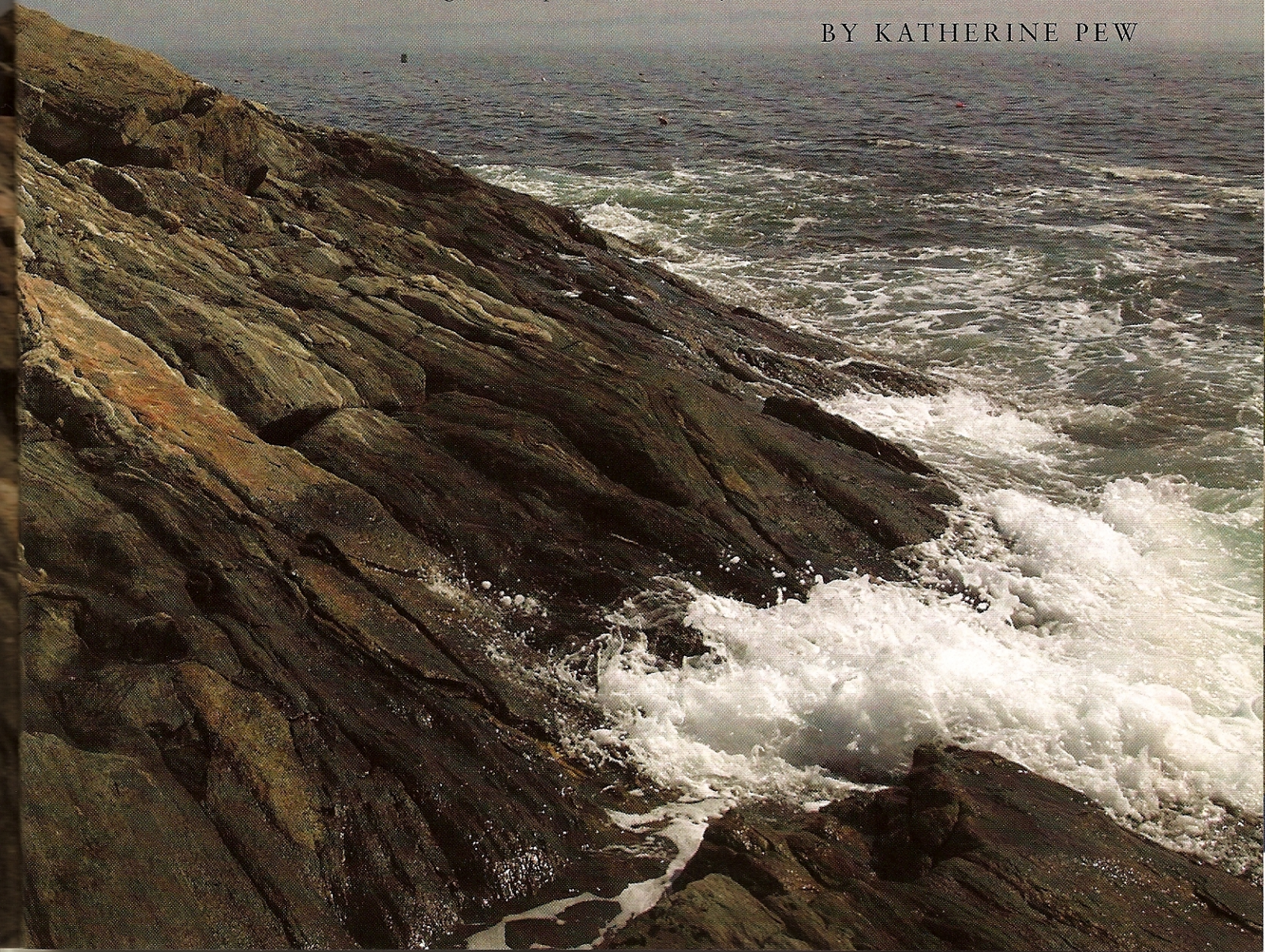
When Ellen Kiley was 13, flouncing around in her new watermelon-pink bathing suit, she stopped short in front of a full-length mirror, dismayed to discover that one of her hips was slightly larger and sticking out a bit. It was the first visible sign of scoliosis (a lateral curvature of the spine). Then, when she began to notice that her skirts did not hang straight, she began to sense that there was something wrong.

But when her mother took her to the pediatrician, he told them not to worry, explaining that many girls her age had minor cases of scoliosis in conjunction with growth spurts. He sent her home with some exercises, which she practiced diligently.

Sports were a big part of Ellen's life, and she excelled in gymnastics, figure skating, lacrosse, and tennis. But long athletic practices and tough games brought on back pain, and she was beginning to develop asymmetrical knots of muscle. The lateral curve in her back continued to grow until she was in severe pain. At 15, she went to a specialist who told her that her lumbar curve was 36 degrees—a "gray area." Her treatment options were either to wear a back brace in conjunction with exercises or have what was called the Harrington Rod operation, followed by nine months in a body cast.



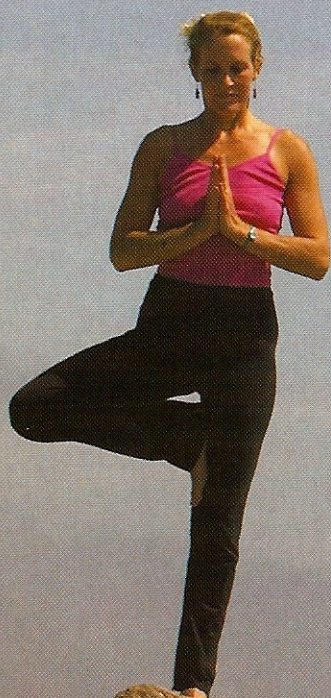
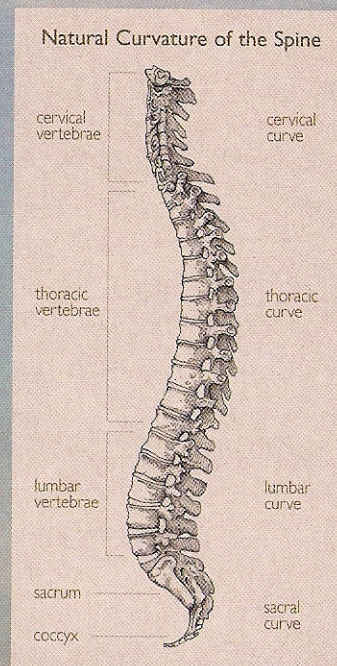
BY KATHERINE PEW



## The Mechanics of Scoliosis

"Scientists know that scoliosis is genetic, but no one knows whether it is a muscle imbalance that pulls the spine off center, or asymmetrical spine development that naturally causes the muscles to develop imbalances. A typical scoliosis musculature is overdeveloped on, let's say, the lower left side of the lumbar spine, while it is completely atrophied on the right side; and there will be a corresponding reversal in the thoracic spine (overdeveloped on the right, and underdeveloped on the left). The overdeveloped muscles are doing constant work to hold up the part of the spine that is resting on them, so they never alternate with the opposing side as healthy bodies do, but are always tense, while the opposing side is pretty well dead. If you think about it as mechanics, it's like a car with some parts that are out of whack, so the whole thing never runs smoothly. Those chronically tense muscles are where the pain starts, and eventually the inner parts of the discs on the curved spine will be pinched."

—Ellen Kiley



### A Botched Surgery

The brace was a molded full-body metal and plastic piece, which she would have to wear 23 hours a day for an indefinite length of time—with no promise of success. The operation involved fusing the spine between the 11th thoracic vertebra and the 5th lumbar vertebra, and the insertion of a steel rod. The doctors assured her that when she emerged from the body cast, she would be cured: her spine would be straight. "I had no idea of what to do," said Ellen. "It made me have to grow up suddenly."

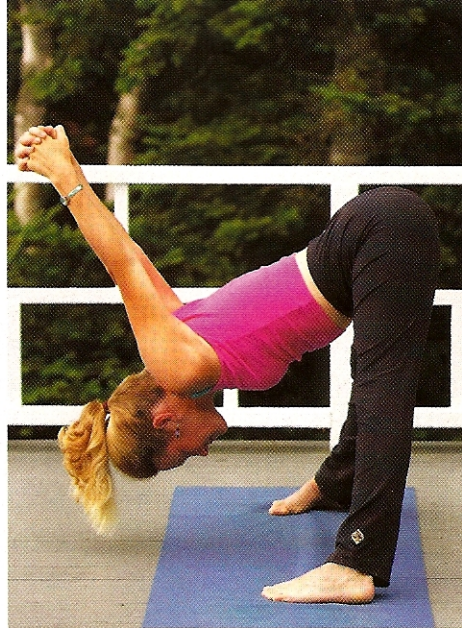
After agonizing over her choices, Ellen opted to spend six months of her sophomore year in the brace, vigilantly practicing the textbook exercises her doctor had prescribed. At the end of six months she was told that not only had there been no improvement, but her condition may even have deteriorated. Dreading the thought of being confined to a brace through college (and afraid that she would never find a boyfriend), she decided to go through with the surgery.

Unfortunately, instead of simply straightening the lateral curve, the surgery also straightened the

natural curve in the lower back, and the whole of Ellen's lower spine, from T11 to L5, was fused as straight as a broomstick. The joint at the base, where the spine connects to the sacrum, was left unfused, and that meant that all of the stress caused by movement, which should have been distributed evenly throughout the curve of the lower back, was placed on that one joint.

Ellen put on a brave face, took her SATs in bed, and spent her junior year in a body cast. But as time passed, the insidious pain in her lower back grew progressively more severe. Any exercise, even standing, put stress on the joint at her sacrum and exacerbated the pain. But when she didn't exercise she put on weight, and her abdominals grew weak because she could not bend forward. This also made the pain worse—and it depressed her.

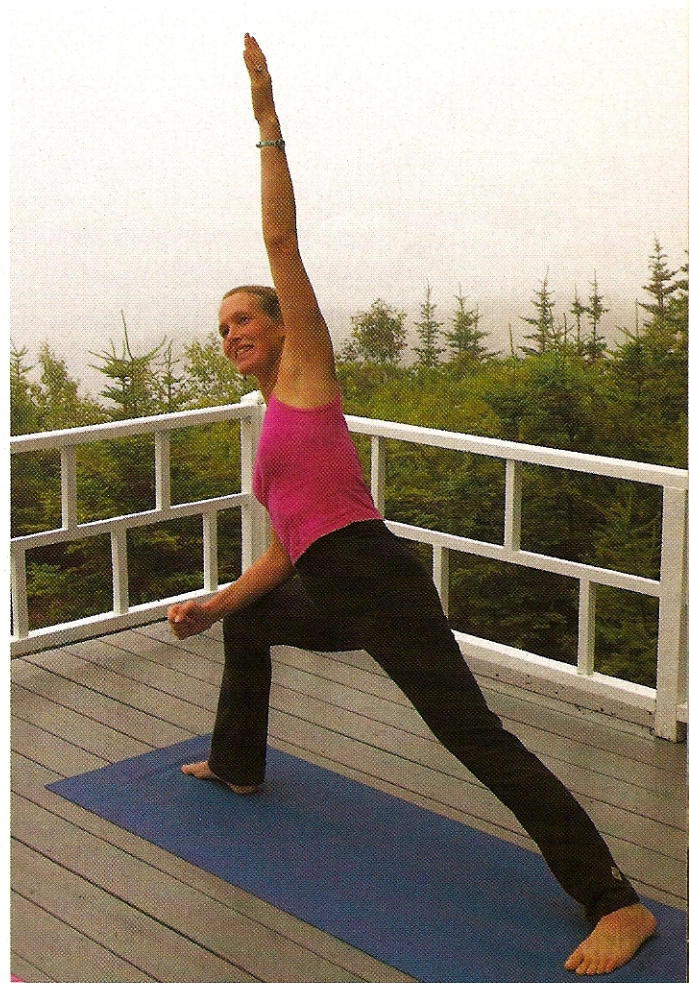
The pain had dug its claws into every aspect of Ellen's life. Meditation proved to be the best therapy for untangling her long-term anxiety.



Ellen tried to keep a positive outlook, but with each passing year, the pain wormed its way in deeper, and she was able to do less and less. For the next fifteen years, she went to one doctor after another, each of whom prescribed the same, ineffective back exercises, gave her a prescription for painkillers, and told her to work on her abdominals—an excruciating endeavor which further ground down the joint at her sacrum.

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Finally, in the summer of 1994, Ellen's anger and frustration bubbled over. She stormed in to see her current doctor and told him that her life wasn't



worth living—she couldn't bear the relentless pain. "And then miraculously," Ellen recalls, "he said, 'Okay, well, if it's that bad, there's a doctor in Boston who has based his career around redoing these flat-back surgeries.'"

Ellen was stunned to realize there was an option she had never been told about. She did some research and discovered there were a handful of doctors making their careers out of redoing the disastrous "flat-back" operations of the 1970s and '80s. It turned out Ellen was one of thousands of patients who had had this surgery, and they all suffered the same painful disk degeneration.

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"To my amazement," Ellen remembers, "I was led to Dr. Boachie, who specializes in undoing botched surgeries like mine. They go at it with saws and hammers and chisels, and in the spring of '95, I braved this last chance and had the entire fusion taken out and redone to include the natural curve in the lower back, with two curved supporting rods on either side." (Ellen has found that most people she meets who have this modern, more advanced form of Harrington Rod surgery today are happy with it.) "My first surgery had left the joint at the sacrum unfused, but since that was where all the joint deterioration and pain had developed, I now had to have

that joint fused as well. This took away my pain, but it meant losing all flexibility in the pelvis."

### **A Ray of Hope**

About six months after this second surgery, Ellen was walking more or less normally but was weak from so much bed rest. She felt fragile and craved exercise that would make her strong and flexible, but lifting her legs enough to climb stairs still hurt her fusion, plus she had a history of pushing herself too hard in class situations. "My friend Melora kept begging me to come with her to a yoga class at Jivamukti," Ellen says. "I kept shaking my head, but she

kept pressing me. She told me I could be very gentle and only do what I felt up for." So Ellen finally agreed to try.

She could barely hobble up the steps to Jivamukti's second-floor East Village walk-up, but after the first class she was hooked. "I was fortunate," she says, "because my first teacher, Adrienne, was so attentive. When I told her that I had recently had back surgery, she stayed close to me for much of the class, reminding me to breathe deeply, evenly, calmly, and to let my breath be the guide to how far to push myself. She told me not to worry about whether I could do what other people were doing. 'As long as you are

aware of each breath while you are practicing,' she said, 'you will not get hurt in yoga.' I tried it and it worked, so that gave me the confidence I needed to let go of my fear. In my fragile condition, I could keep coming up to the edge of my limitations and just breathe there. It felt wonderful.

"What clinched it for me was the experience in *shavasana*," Ellen continues. "I listened to Adrienne's gentle voice guiding relaxation through all the body parts, encouraging the thoughts to drain out the back of the head like a stream of water. She told us to experience the divine self, the energy of being beyond body and mind. And she stayed with me, massaging my temples and forehead. It was such ecstasy, after all the years of physical trauma, to realize that I could just stop worrying about my body for a few minutes. I completely blocked out any self-consciousness or embarrassment or desire to look the way other people do in the poses," she says. "I just followed directions, came up to my limitations, and felt each breath coming in and going out."

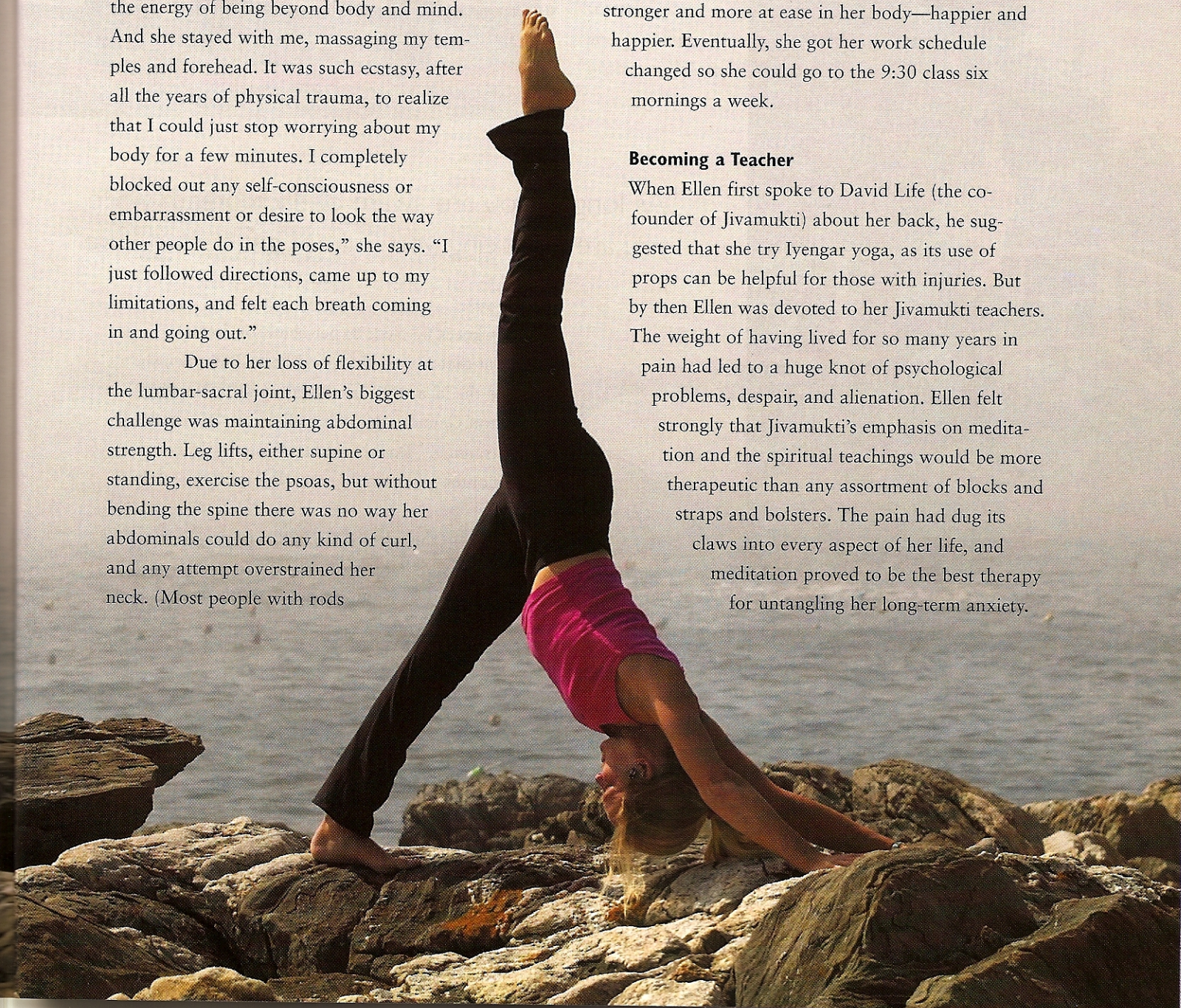
Due to her loss of flexibility at the lumbar-sacral joint, Ellen's biggest challenge was maintaining abdominal strength. Leg lifts, either supine or standing, exercise the psoas, but without bending the spine there was no way her abdominals could do any kind of curl, and any attempt overstrained her neck. (Most people with rods

develop arthritis in the neck.) The only way she was able to exercise her abdominals was with *kapalabhati*, a vigorous cleansing breath. Kapalabhati also tones the diaphragm muscle, which plays an important role in posture.

"I remember my new back being sore and tender for a couple of days after each class," Ellen says, "but it felt like the right kind of sore—stretching muscles and developing strength." So when she felt she could go to class twice a week, she did, and when she felt she could go three times a week, it was a sweet victory. Every week that passed, she felt stronger and more at ease in her body—happier and happier. Eventually, she got her work schedule changed so she could go to the 9:30 class six mornings a week.

### **Becoming a Teacher**

When Ellen first spoke to David Life (the co-founder of Jivamukti) about her back, he suggested that she try Iyengar yoga, as its use of props can be helpful for those with injuries. But by then Ellen was devoted to her Jivamukti teachers. The weight of having lived for so many years in pain had led to a huge knot of psychological problems, despair, and alienation. Ellen felt strongly that Jivamukti's emphasis on meditation and the spiritual teachings would be more therapeutic than any assortment of blocks and straps and bolsters. The pain had dug its claws into every aspect of her life, and meditation proved to be the best therapy for untangling her long-term anxiety.





“As long as you are aware of each breath while you are practicing, you will not get hurt in yoga.”

draw her knees up close to her chest, or do any movement that rounds the lower back. But when she broached the idea to Jivamukti cofounders David Life and Sharon Gannon, they were all for it. “If you do the teacher training,” David told her, “you can learn in twelve months what would otherwise take you twelve years.”

So in the fall of 1999, Ellen began teacher training. We were in the same class, and I was struck by her strength and focus. I was amazed to learn what she had been through and was inspired by her steady, graceful yoga practice.

The more she learned, the more Ellen realized how much she wanted to teach. She expressed her insecurities about it to David, telling him she was afraid she wasn’t cut out to be a yoga teacher. His reply? “You were uniquely designed to be a yoga teacher.”

In 2000, Ellen graduated and began teaching, and in 2002, after twelve years together, Ellen married her boyfriend, Michael. They live on a farm in Whitefield, Maine, where they are organic blueberry and

Ellen pored over the books her teachers recommended, including the *Yoga Sutra* and the *Bhagavad Gita*, and became a regular at the Jivamukti *satsangas*. She wanted to immerse herself further in the yoga teachings. She considered taking the teacher-training program, but was worried that her physical limitations would stand in the way. There were certain things she knew she would never be able to demonstrate, such as backbends and jumping forward and back in sun salutations. Her lack of pelvic mobility also meant she couldn’t rest in child’s pose, squat with her heels down,

blackberry farmers and beekeepers. Ellen has finally found a way to live relatively free of pain. She can jog several miles, go for an all-day hike, tend a large vegetable garden, and even paint her house—as long as she makes time for yoga. “I have to move more slowly than I would like to,” she says, “and heavy lifting is out, as is any repetitive activity where I am not free to move around and change positions frequently. My neck is my vulnerable area, and it hurts sometimes, but I know how to manage it.”

### **New Alignment**

Two years ago, Ellen opened her own yoga studio in an old mill on the Sheepscot River, three miles down the road from the farm. She teaches from her own experi-

ence. “Yoga examines the workings of the whole body, mind, and spirit when addressing a specific issue,” she says. “For example, neck pain may be rooted in the habitual angle of the pelvis and can be addressed, in part, through focusing on the realignment and movement of the legs and feet. But neck pain can also be exacerbated by anxiety and impatience, or by feelings of spiritual disconnection. Yoga treats the psychological and spiritual as well as the physical. Meditation can relax the central nervous system as well as the chronically tight muscle groups running along the spine.”

Ellen stresses the importance of grounding all standing poses with balanced feet and engaged thighs and perineum. This provides a base of support for the process of lengthening, straightening, and untwisting

## **More about Ellen**

Ellen spoke recently about the therapeutic effects of yoga in treating scoliosis at a spine conference in Florida. She is planning yoga workshops to help those with rods in their backs, and she is working on a book about yoga and scoliosis. You can contact her at [ellen@scoliyogi.com](mailto:ellen@scoliyogi.com) or visit her organic farming website at [www.beeherenow.com](http://www.beeherenow.com).

