

# controlled instability

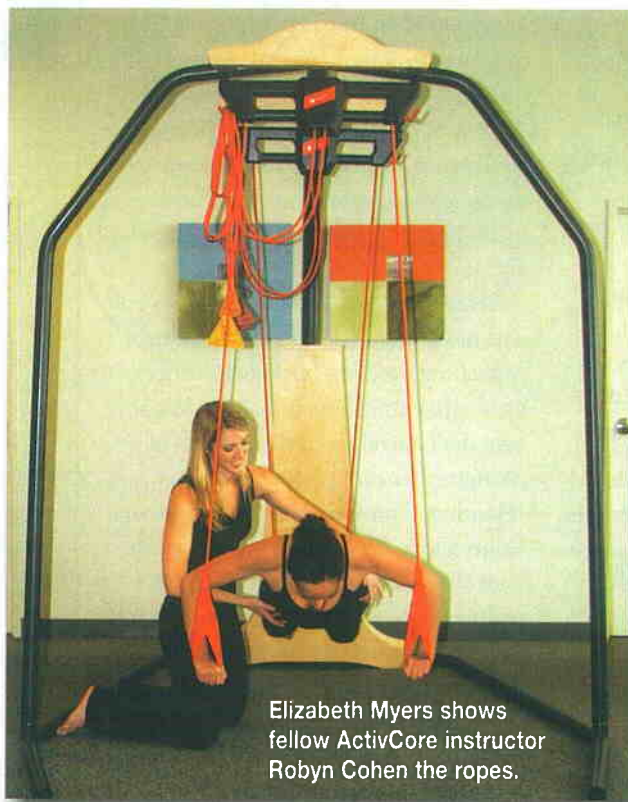
a norwegian system of ropes, slings and loops  
delivers a unique neuromuscular workout

BY ANNE M. RUSSELL

If you've ever taken a yoga class, you've probably endured the following criticism from the instructor:

You're holding a Plank pose, supported only by your palms and the balls of your feet, and the teacher tells you to lift one leg off the floor and raise it a few inches. Just when your entire body begins to tremble with fatigue, she quips, "Okay, now lift the other leg."

Just a joke, right? Maybe to her, but not with ActivCore FEX, an extraordinarily versatile exercise and therapeutic practice that's poised to become the next big thing. Brand-new to the Pilates, fitness and rehab communities, ActivCore is the American version of the original Norwegian Redcord, a kind of anti-gravity yoga program that involves a collection of, yes, *red* cords, as well as loops and slings, that are suspended from overhead. ActivCore is an ideal complement to Pilates because the controlled instability produced by suspension in the cord-and-sling setups focuses the user's consciousness on muscles that have previously escaped attention. "I sometimes say it's Pilates on steroids," notes Victor Katch, PhD, who is the chief science



Elizabeth Myers shows fellow ActivCore instructor Robyn Cohen the ropes.

officer of ActivCore, LLC and a professor of movement science at the University of Michigan Medical School.

"I use it to solve a problem the client hasn't been able to solve on her own in Pilates," explains Trent McEntire, owner of McEntire Pilates in Rochester, MI, the very first Pilates studio in the U.S. to install the equipment. "If the person has muscles that aren't working or are over-

working, I'll go over to the ActivCore station with her and do some diagnosis and work with her to activate those muscles."

Bottom line: An ActivCore workout, when led by a skilled instructor like McEntire, is remarkably challenging, no matter your level of fitness. Katch explains what makes the exercise system so efficient in homing in on muscle weakness or imbalance: "The controlled instability activates all muscle fibers to fire. You don't get that from exercise that maximizes stability. ActivCore incorporates a lot of different aspects that make it functional exercise."

Indeed, the letters *FEX* in ActivCore FEX's official name stand for *functional exercise*, a hot topic in the fitness world right now. And, as its name suggests, ActivCore centers on the core muscles, although it also excels in shoulder work. In fact, it was two remarkable shoulder-injury stories that brought Redcord to the U.S. via Ann Arbor, Michigan-based Internet entrepreneur Richard Beedon, a former IBM executive.

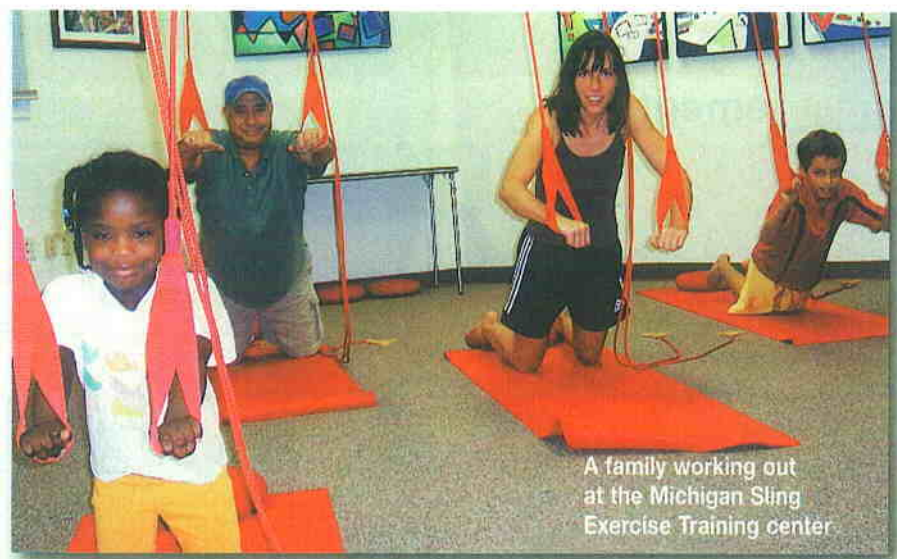
In 2007 Beedon and a group of friends and family (including Victor Katch, who is his brother-in-law and the

one who encouraged the system) met with the Norwegian owners of Redcord and observed a demonstration of the equipment. Calling for volunteers from the audience, the Norwegians put both Beedon's wife and a collegiate swimmer through a series of Redcord exercises. Beedon's wife had not been able to raise her arms over her head for 16 years because of an injury, and the young swimmer had been sidelined for the season with a shoulder-girdle problem.

In a dramatic denouement more befitting a Pentecostal revival than a fitness demo, both women experienced "miracle cures"—or, more accurately, neuromuscular breakthroughs—in which long-dormant muscles went to work and returned functionality to the shoulder within 15 minutes of their using the system. Beedon was sold. He contracted exclusively to bring the system to the U.S. and set to work selling installations.

The first installation in Southern California went to Core Conditioning in Studio City, a light, airy, 3,000-square-foot facility that offers Pilates, Gyrotonic and physical therapy. It is co-owned by Dawn-Marie Ickes, MPT (and a member of *Pilates Style's* advisory board); Gabrielle Shrier, MPT; and Allyson Cabot, PT. Core Conditioning now has three ActivCore units: two full-scale overhead setups (\$4,500 apiece) and a freestanding one (\$4,000), which is slightly less versatile. Twelve of their instructors or physical-therapy assistants are trained in ActivCore, and in the eight months they've been offering it, about 40 clients, ages 18 to 65, have tried it.

Like Beedon, Shrier and Cabot were sold on the equipment the moment they saw it, and they persuaded Ickes to add it as a complement to their existing Pilates offerings. "In Pilates," Shrier says, "we're trying to get the client to use the right muscles; ActivCore makes the client find the right muscles unconsciously. It's innate within the equipment." Adds Ickes, "Pilates and ActivCore are not con-



A family working out at the Michigan Sling Exercise Training center.

flicting philosophies; the theory and concept is the same. You're targeting the same system in the body. One doesn't replace the other."

Because it forces the user to find the right muscles, ActivCore makes it very difficult to cheat on the moves—something almost all exercisers unconsciously become very good at once they've mastered new equipment. But when you are dangling in ActivCore's loops, there's nothing to brace against to create leverage: You have to initiate and generate all motion entirely from your core muscles. Even in Pilates, there are ways to "work around the work."

As a triathlete, competitive cyclist and ice-hockey player, I expected ActivCore to be challenging, but not nearly to the degree that it proved to be. The protocol is four repetitions of any given move, repeated four times with 30 seconds of rest. By the end of the hour-long session with Core Conditioning instructor Robyn Cohen, I was drenched in sweat from the effort and concentration it took to do, for example, a One-Legged Bridge, with one foot in the loop and the other leg unsupported. Likewise, a Side-Lying Plank or Scissors, where the lower leg rises to meet the upper leg in the loop, was way more challenging than the floor-based version. With each move, Cohen reminded me to keep my ribs held in tight, my shoulders down and shoulder blades flattened, as in Pilates.

Early on in my ActivCore training sessions, I found myself in a levitated Plank position. With both feet in the loops and

neither on the floor (as per the yogi's quip) and supporting myself on my hands, I drew my knees into my chest. All this while still maintaining a tight, firm torso. To put it mildly, this was hard. Cohen saw me grit my teeth and said, "This is the dirty work," meaning that the smallest, weakest muscles, which other forms of exercise give a pass to, get isolated and worked in ActivCore.

But it doesn't *have* to be grueling, says McEntire. Quite the opposite. "One of the clients I've had the most success with is 75 years old, 100 pounds overweight and is waiting for a knee replacement," he says. "It's like a whole new world for her when I can off-weight her. I can make it like she's floating." Nor is this his only client with limitations; he also does combined Pilates and ActivCore sessions with two clients with Parkinson's and one with multiple sclerosis. The key is adding slings—under the neck or pelvis, for example—to give the client the support and stability that's appropriate for his or her level of fitness. McEntire says there's no one-size-fits-all prescription for blending Pilates and ActivCore. For some clients he might do half and half; for others he'll do just 10 or 15 minutes of ActivCore, depending on what he observes about the person that day. He has used it with every single client at this point, although he has only one who's followed the 55-minute, twice-a-week ActivCore-exclusive regimen that I did.

Typically, after a 55-minute ActivCore session with Cohen, I was spent; I felt like I had burned 600 to 700 calories,

about the same amount as I would by cycling hard in the mountains. Not so, says Katch. He estimates that the calorie burn for ActivCore is between 300 and 480 calories per hour for a 145-pound woman, roughly the equivalent of an equal amount of circuit weight training and still a very respectable energy expenditure. "It doesn't replace cardio exercise, and it doesn't replace strength training," says Katch. "But we spend more time taking care of our teeth every day than we do our neuromuscular system or our core muscles. It's a no-brainer from a science standpoint to do ActivCore every other day."

I didn't experience a miracle cure, though I'd secretly been hoping for one. Since 2005 I've invested nearly a year in on-again, off-again physical therapy to recover from knee surgery and the muscle atrophy associated with it. I regained most of my strength, and I returned to competing in sprint triathlons, even taking first and second places for my age group in a couple events. But my body still didn't feel

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right—the symmetry and ease of motion I had before the injury hadn't returned, and my back ached most all the time.

Even though I didn't leap out of the cords after 15 minutes with new functionality, after just six sessions my performance in training events had improved noticeably. Today I am faster and stronger in running and cycling, and my skating strength and balance have improved. I'm no miracle on ice, but I can feel the subtle difference. By awakening and strengthening key stabilizer muscles in my hips and torso, ActivCore helped me get everything



A Czech soccer team trains on the portable Mini equipment.

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working in concert and, more important, alleviated the pain in my back.

I look better, too. My hips are more symmetrical, my lower abdomen is flatter, and my swaist seems smaller because my ribs aren't protruding and my upper body isn't slumping into my pelvis. Like Katch, Beedon and the women at Core Conditioning (and Davy Jones, hey,

hey, hey!), I'm a believer.

Power Pilates proprietor Howard Sichel, DC, is a believer, too, and he's committed to helping Beedon and company take ActivCore to the next level. Sichel is working with the Michigan team to implement a national training program, known as the Master Studio initiative. There are currently 14 training facilities, with Core Conditioning in Studio City, CA, and McEntire Pilates in Rochester, MI, as the original founding members. Sichel, in his role as chairman of the New York City-based Wellness in Motion, is working with

Katch and the other founding members to develop a structured curriculum for trainers. "I view this as the first time that the Pilates community can work together in training for this brilliant piece of equipment," says Sichel.

The first training sessions for Master Studio participants began in April 2009. Over the next 12 months, Sichel says, they hope to train 600 instructors. Beedon adds that ActivCore aims to have 50 Master Studio training centers established by the end of the year and 200 or more ActivCore installations in Pilates studios by that time. In 2010 he wants to double that number to 400.

Last January ActivCore got a surprise shout-out from the original queen of exercise herself, Jane Fonda. On her blog ([janefonda.com](http://janefonda.com)) the actress included a homemade video of herself trying ActivCore at Pilates on Fifth, one of two New York City locations with the equipment. (Sichel's Power Pilates is the other.) "It is very intense and their clients seem to really like it," writes Fonda. And if Jane Fonda likes it, can the leotarded workout masses be far behind?

*Anne M. Russell writes frequently about health and fitness.*