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HEALTH & WELLNESS

Treadmills Unplugged: A Gym Workout Powered by Your Feet

Green-energy manual treadmills gain ground in high-end clubs and CrossFit Games events

By Rachel Bachman Follow

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As workouts get more digitally connected, the most popular piece of gym equipment is cutting the cord.

Treadmills without motors, or manual treadmills, are popping up in high-end health clubs and at the CrossFit Games, an international fitness competition. Instead of pressing a button to start a mechanical conveyor belt, users make the belt go simply by moving their feet.

On a recent weekday morning, Gayle Saraydarian introduced her 14-year-old son, Eric, to one of two manual treadmills at a 24 Hour Fitness in Englewood Cliffs, N.J., where they live.

The treadmills, made by Woodway, based in Waukesha, Wis., have a slightly concave tread surface, like the bottom of a hamster wheel. The front and back of the tread are higher than the middle, a design that uses gravity to help accelerate and brake. The belt speeds up when users move toward the front and slows down when they move back.

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Gayle Saraydarian and her son Eric, 14, work out on Woodway Curve motorless treadmills at a 24 Hour Fitness in Englewood Cliffs, N.J. PHOTO: BRIAN HARKIN FOR THE WALL STREET JOURNAL

While her son wobbled to gain his balance, Ms. Saraydarian walked briskly without holding on. She loves that the treadmills promise to burn up to 30% more calories than motorized versions, in part because users propel the heavy-duty rubberized surface with their own energy.

“If you run, forget about it,” Ms. Saraydarian says. “It’s even harder.”

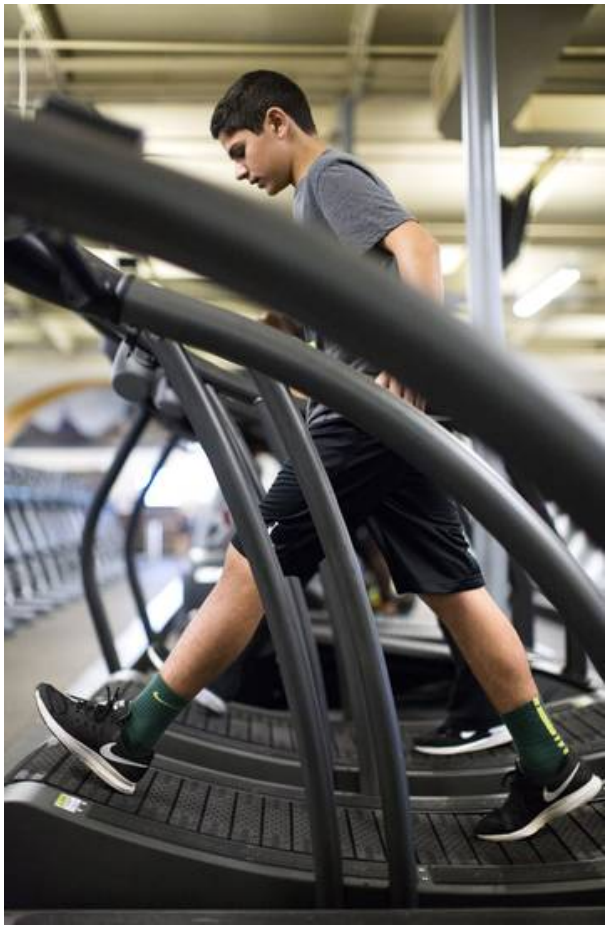
For about a year, the 24 Hour Fitness chain has been trying out nonmotorized treadmills at 20 of its 456 locations nationwide.

Town Sports International, a 160-club chain in the Northeast, has manual models at 10 locations. Quieter than treadmills with motors, they are especially useful in Manhattan clubs situated above other tenants, says Ed Trainor, TSI’s vice president for fitness, services and product development.

The spread of manual treadmills coincides with the rise of high-intensity interval workouts, functional training and boutique gyms with smaller spaces than large clubs. Nonmotorized treadmills are generally smaller than traditional ones and don’t require power strips or outlets. Their digital displays are battery-powered.

Beyond Studios, a fitness boutique with three Dallas-area locations, uses 10 manual treadmills in a class that rotates participants through running, Pilates and kettlebell lifts. Elissa Fairchild, Beyond Studios director of business

development and strategic planning, says the treadmills help encourage proper running form.



Eric Saraydarian walks on a Woodway Curve. He said it took him a few minutes to learn how to balance himself on the machine. PHOTO: BRIAN HARKIN FOR THE WALL STREET JOURNAL

"A lot of people, when they run, they sink back into their heels or they kind of stomp the ground," she says. "But with these treadmills, you really have to think about reaching and pulling that belt with your toebox."

The belts speed up and slow down with the runner, making them useful for short-burst workouts. Though the treadmills take some getting used to, some people say they feel safer. "You're not going to get shot off the back of it," Ms. Fairchild says. "If you stop, it stops."

Accidents on treadmills cause about 24,000 injuries annually. In May, Silicon Valley entrepreneur Dave Goldberg, the husband of Facebook chief operating officer Sheryl Sandberg, died after falling off a treadmill and hitting his head.

CrossFit, a popular strength-and-conditioning program known for its rigorous routines, in May used nonmotorized TrueForm Runner treadmills made by Chapco Inc. at eight world-wide regional competitions for the CrossFit Games. Some of the 1,240 athletes in the multi-event competition recoiled at the notion of running on a machine, CrossFit Games director Dave Castro says. CrossFit shuns much of the equipment found at traditional gyms.

"The feedback from the athletes was, 'It was so painful. It was so difficult,' " Mr. Castro says. "That's what I was looking for."

Equipment company Star Trac is working on a type of nonmotorized treadmill on a fixed incline to launch early next year. It will be designed for workouts such as weighted sled pushing, but for gyms with limited space, says Jeff Dilts, a vice president at Star Trac's parent company, Core Health & Fitness.

"Our thing is, you've got to make it affordable to the masses," he says, adding that the company aims for a price below $2,000.

Competitors run a mile on a TrueForm Runner manual treadmill in May in Ballerup, Denmark, at a regional site of the CrossFit Games, an international fitness competition. PHOTO: ALICIA ANTHONY/CROSSFIT

Manual treadmills have been around for ages. But recent versions are a far cry from the rickety $200 versions gathering cobwebs in the basement. The newer human-powered treadmills are made for commercial use. Rather than a thin belt, the running surface has rubberized or synthetic slats, like the treads on a military tank. It is slightly curved, moving over ball bearings that all but eliminate friction.

These rugged manual treadmills cost about $6,000, as much as or more than motorized ones. But they offer advantages—chiefly, there is no motor to break down.

While walking on a motorized treadmill at 24 Hour Fitness, Tighe Berni, 65 and semiretired in Fort Lee, N.J., said he'd tried a Woodway Curve a few times. He prefers motorized treadmills with set programs that change incline and speed.

Motorized treadmills at health clubs typically have speed limits that top out at 15 miles an hour. NFL players have exceeded 22 miles an hour on the Woodway Curve models used at EXOS training centers, a chain used by pro athletes, says Nick Winkelman, director of education. That's slower than the athletes can run on the ground, where they don't have to move the weight of the treadmill's belt.

College football players preparing for NFL Draft evaluations use the treadmills in short-burst efforts to train for the 40-yard dash, Mr. Winkelman says.

The three-year-old HiTrainer Pro, a nonmotorized treadmill made by HiTrainer, of Bromont, Quebec, has been used mostly by professional teams, including the NBA's Dallas Mavericks, largely because of its $17,000 price tag. It has pads that users lean into as they run, like a sprinter coming out of starting blocks.

Denise Thomas runs on the TrueForm Runner at Reebok's headquarters in Canton, Mass. PHOTO: WENDELL WEBBER/TRUEFORM

But HiTrainer spies a growing market. It plans to release a $6,000 model for health club use and is aiming to make a $2,000 model within two years, HiTrainer inventor Brian Robinson says.

Nonmotorized models' share of Woodway's treadmill business is about 20% and growing, says Eric Weber, director of sales and marketing. "I don't believe it will ever take over the mainstream treadmills," Mr. Weber says. "People are still going to want to push the buttons and go."

Indiana University has 28 nonmotorized treadmills in its two student recreation centers, versus 27 traditional treadmills. The school chose the nonelectric versions because its fitness areas lacked enough outlets to handle all motorized treadmills, says Chris Arvin, Indiana's director of fitness and wellness. Students

gravitate to the unplugged machines because they're different-looking, more challenging and a greener option, he says.

Treadmills are the most popular piece of exercise equipment at health clubs, according to the International Health, Racquet & Sportsclub Association. Commercial manual treadmills remain a fraction of the market but are popular enough to have caused conflict in the industry.

Alex Astilean, founder of SpeedFit, an East Hampton, N.Y., maker of nonmotorized treadmills, alleges in lawsuits that Woodway and Chapco breached contracts with him and are improperly profiting from his ideas. Representatives of Woodway and Chapco denied the lawsuits' allegations.

Ms. Saraydarian of New Jersey and other mothers go to 24 Hour Fitness after they drop off their children at a nearby school. Her only complaint is that there are just two nonmotorized treadmills. "I have a regular treadmill at my house," she says. "But it's boring."

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