Pilates Equipment Primer
by Daniel Wilson

A comprehensive guide to must-have Pilates products.

A recent Web poll from Physical Therapy Products asked PTs what kind of alternative therapy methods were available in their practices. Eighty percent of all respondents indicated that they included Pilates as part of their rehabilitation repertoire. This is just another in a long line of signs showing that the use of Pilates within rehab is growing steadily in popularity.

Not that this will surprise anyone familiar with the exercise. Method founder Joseph Pilates originally created Pilates as a system of rehabilitation for soldiers injured in WWI. Its basic principles of core strength, stability, and balance are the same as those found in most forms of orthopedic therapy.

One person very familiar with Pilates is Ken Endelman, who founded Balanced Body, a Pilates equipment manufacturer based in Sacramento, Calif, in 1976 (originally called Current Concepts). Endelman began to hear that many clinicians were starting to look at various pieces of Pilates equipment as prospective tools of their trade. He began to meet with PTs from all over the world to see how he could modify his equipment to better accommodate the rehabilitation sector.

The payoff was a full line of equipment designed to work in the fitness and wellness arenas while also meeting the needs of PTs looking to facilitate a positive movement experience for their clients.

In 2004, Endelman suffered a broken neck in a body-surfing accident and experienced firsthand the effectiveness of Pilates equipment for rehabilitation. After getting clearance from his physician, Endelman began rehab sessions on the Reformer. Just 14 weeks after the accident, he was cleared to resume one of his main hobbies: open-road cycling. He and his physicians attribute much of his speedy recovery to his Pilates sessions.

The Difference Between Mat Work and Equipment
For clinicians considering incorporating Pilates into their practices, Endelman says the first thing to understand is the difference between mats and equipment in the world of therapy. "The equipment is a great place to start for new clients because it provides assistance, making the movements easier for beginners," he says. "It also provides feedback for clients so that they can improve their movement patterns quickly and easily. Pilates mat work, in combination with home exercises from the physical therapy repertoire, is great for daily practice or for introducing clients to the principles of Pilates."

By picking movements and modifying the exercises, a therapist using equipment can make the initial therapy very supportive and assisted. Patients can learn to "organize" their bodies and incorporate the principles of Pilates. Equipment sessions can then be as easy or as challenging as desired, depending on the physical ability of each client.

Pilates Tools
Here’s an overview of the major types of Pilates equipment now available to therapists.

Reformer
(Price range: $1,645 to $4,695)
"The Reformer is the main piece of equipment used in Pilates exercise," Endelman says. It is basically a gliding carriage attached to rails inside a rectangular frame. The carriage is connected to springs, with pulleys and ropes attached to the frame. Depending on your client's condition, exercises are done lying supine or prone, or sitting or kneeling on the carriage. The client pushes off the footbar or pulls on the straps, using the arms, legs, wrists, and ankles.

"The big reason why it is so good for therapy is that it can both assist and resist a movement. And it also provides an effective, low-impact workout that is easy on the joints, so it's good for populations like older adults," Endelman says.

For those with back injuries, the Reformer is a great diagnostic tool for therapists. "You can watch how a client puts his or her spinal movements together in flexion, extension, rotation, and lateral flexion, and when they are combining it with upper- and lower-body movements. The Reformer also helps you replicate daily activities or sports-specific movements, for both assessment and rehabilitation."

**Trapeze Table (aka Cadillac)**
(Price range: $3,400 to $3,500)

The Cadillac is a horizontal tabletop surrounded by a four-poster frame with an assortment of bars, straps, springs, and levers attached. A tremendous variety of exercises can be performed on the Cadillac, from gentle spring-assisted sit-ups to advanced acrobatics that have one hanging from the upper bars.

"The Cadillac is great for initial patient evaluations. It is also a good piece of equipment in teaching patients how to attain neutral spine. And, like the Reformer, the springs provide assistance and are easy on the joints," Endelman says.

In addition, because the Trapeze Table is raised a bit higher than a Reformer, it is also very good for working with older adults because they can get on and off it easily.

**Reformer/Trapeze Combination**
(Price range: $5,800 to $6,000)

The Pilates Reformer/Trapeze Combination is ideal when space is a consideration, as it combines a complete Reformer with a Trapeze Table. A therapist can change from Trapeze to Reformer by removing the twin mats, inserting the removable shoulder rests, positioning the risers, and raising the footbar. This allows a small practice to have a fully equipped Pilates studio in the space of one treatment table.

**Half Trapeze**
(Price range: $3,500 to $5,000)

This piece of equipment also combines the Reformer and the
A clinical Reformer/Trapeze combination unit.

Chairs
(Price range: $700 to $2,800)
Chairs provide a fun and challenging strength workout within a small footprint. Most commonly known as the Wunda Chair or Combo Chair, they resemble a stool with a single or split footbar at the bottom. Handles, chair backs, rotational disks, and other accessories can be added for increased variety.

"They're really great for your postrehab patients and those who want to continue to take classes in order to improve their sports performance," Endelman says. The Pilates Chair is especially useful for strengthening the legs to help clients climb stairs, rise from sitting to standing, and improve balance and coordination. It also activates the core muscles in a variety of functional positions including standing, sitting, supine, prone, and side lying.

There are more than 28 different exercise categories on the chair, and they focus on core strength, leg strength, shoulder girdle stability, mobility and strength, and functional movements such as standing, climbing, pushing, and lifting.

The Ladder Barrel
(Price range: $995 to $1,395)
This consists of ladder-like rungs and a rounded barrel-like surface on which a multitude of stretching, strengthening, and flexibility exercises can be performed. The barrel is separated from the ladder by a sliding base that can adjust to accommodate different torso sizes and leg lengths in a range of Pilates exercises. The Ladder Barrel is exceptionally well designed for strengthening back extension and improving spinal mechanics.

Pilates Springboard
(Price range: $395)
"This is kind of a modified Reformer that attaches to the wall so it doesn't take up much space," Endelman says. The Springboard includes various attached springs, straps, dowels, and handles. Clients can get a full-body workout by standing forward, backward, or sideways, or sitting or kneeling in front of the board and pulling on the straps with their hands or feet.

Circles
(Price range: $29.95 to $59.95)
These rings are made from sprung steel or flexible plastic with contoured handles. Also called Magic Circles, they are available in a range of resistance tensions (from band level two to four) and diameters (12 inches to 14 inches), to meet the needs of different body sizes and abilities. They can be used standing, sitting, or lying down on your front, back, or side. For abduction and adduction exercises, clients use their legs or arms to squeeze in or pull out on the circumference.

Foam Rollers
(Price range: $15 to $39.50)
While not originally developed by Joseph Pilates, these foam "poles" have been adopted by the Pilates and therapy worlds to add stability and proprioception challenges as well as myofascial release exercises. The foam rollers are usually 3 feet in length and come in 4-inch or 6-inch diameters. Half rolls are also available for balance work.
"Foam rollers are ideal for improving balance, coordination, and proprioception," Endelman says. "They're also great for clients who may experience muscle tension because they are in a sitting position for a long period of time—like at work. They can relieve that tension by rolling a specific muscle on it."

**Balls**
(Price range: $17 to $40)

The round shape of a Pilates Ball provides an unstable surface that makes users continually rebalance themselves whether they are lying or sitting. These subtle, steadying adjustments help isolate and activate the deepest muscle layers in the core. Ranging from 21 to 30 inches (55 to 75 cm) in diameter, these inflated, vinyl balls can provide a complete conditioning system by themselves.

"Believe it or not, the ball really is one of the most versatile pieces of Pilates equipment," Endelman says. "It can provide a good cardiovascular workout, and a therapist can also re-create many mat and Reformer exercises. It's also one of the best stabilization tools out there."

**Bands**
(Price range: $12 to $18)

About 6 feet in length, these elastic bands range in resistance from light to heavy, denoted by their color. The bands mimic the springs on the Reformer and do not stress the joints. Users stand on the band and do a variety of arm and leg exercises. Bands can be used with specific orthopedic rehabilitation protocols. For example, there are specific exercises for rehabilitating a shoulder or knee injury. Handles can also be attached to each end to make it easier for a patient.

"When using Pilates as a rehabilitation tool, there may come a point when a patient is able to continue his or her therapy regimen at home. Bands are a perfect for that," Endelman says.

Looking to buy Pilates equipment for your practice? Endelman first suggests that you get familiar with the various pieces of Pilates equipment. "You'll get a feel for the exercise as well as what kind of equipment will be best for your practice," he says. In addition, choosing an actual equipment vendor is based on many variables, including price, quality, and durability. You should also investigate what role that company will take with your program. "A good manufacturer shouldn't just sell equipment—they should want a role in helping your practice succeed and grow. Check to see if they offer additional services like instructor training, continuing education, business planning, and leasing," Endelman says.

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