

A graphic featuring a blue and red ribbon. The blue ribbon is on the left, and the red ribbon is on the right. The text "It's a WRAP" is overlaid on the blue ribbon. "It's a" is in a smaller, blue, sans-serif font, and "WRAP" is in a large, bold, blue, sans-serif font.

It's a **WRAP**

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How kinesiotape may bring more customers to your door.

By Ed La Cara, DC, PhD, ATC, CSCS

THE USE OF A BRIGHTLY COLORED TAPE BY ATHLETES AND WEEKEND warriors is on the rise. Whether in the CrossFit box, on the tennis court, or as a desk jockey, kinesiology tape (kinesiotape) has been rapidly gaining popularity with athletes, patients, and physical therapists (PTs). Some PTs also use the tape as an outreach tool and advertisement for the services their clinic offers.

Many athletes have felt kinesiotape's effects on reducing pain and enhancing performance. Every day in my clinic, I see patients feeling relief when I tape them. In addition, when I am out in the community offering patient education, patients seek out my clinic to be taped, which often leads to other service offerings.

WHAT IS KINESIOLOGY TAPE?

We do not fully understand what system within your body the tape affects. Here is what we do know:

- All kinesiology tape is not equal. Quality tape is made of tightly woven elasticated cotton (97 percent) and nylon (3 percent) fibers. These raw materials are critical to how well the tape wears and how well it resists plastic deformation. Low quality tape has fewer fibers/cm² and incorporates a thick, and cheap cotton fiber as opposed to fine cotton fibers.
- The glue on the tape is acrylic, highly durable and waterproof so tape can be worn for up to a week, withstanding vigorous movement, sweat, and total emersion in water. Quality tape uses better glue that is more durable, kinder the on skin, and more resistant to water and sweat.

- When applied correctly, tape can promote several positive changes including less pain, improved function, more power, and better muscular endurance. (See *What Is the Evidence* below for details).

WHAT IT IS NOT

- The tape does not contain any medication or drugs.
- Different colors are cosmetic only. All colors of tape have the same elasticity and benefits.
- The tape is not a replacement for sensible injury management and thorough rehabilitation.

WHAT WILL IT DO?

Kinesiology tape is commonly used clinically to achieve the following:

- Reduce pain
- Drain swelling
- Improve posture
- Improve function
- Facilitate early return to activity or sport
- Improve sporting performance

WHAT IS THE EVIDENCE?

The popularity of kinesiotape has grown and spread worldwide based on its clinical effectiveness to reduce pain and enhance performance.

Although still in its infancy, there are very encouraging signs from research studies, and a body of independent academic research is growing to support the positive effects of kinesiotape.

Research studies have shown kinesiology tape to:

- Improve power and strength in uninjured muscles^{4,6,9}
- Reduce pain and improve function in painful conditions like plantar fasciitis and patello-femoral pain^{1,2}
- Improve pain, range of motion and function in people with shoulder impingement^{5,7,8}
- Raise the anaerobic threshold of muscle during endurance activity³
- A recent systematic review (a research studies into a bunch of other papers on a similar topic) concluded that there was 'moderate evidence to support the use of tape to reduce pain'⁶

HOW DOES IT WORK?

Fundamentally kinesiotape causes a form of decompression between the skin and the tissue underneath. When an elastic membrane (tape) is applied to another elastic material (skin) the result is often a series of wrinkles in both the tape and the skin.

This decompression of the skin and underlying tissue leads to three main effects:

FLUID EFFECT

- The elastic properties of tape induce a vertical lift of skin (via the formation of wrinkles) from the underlying tissue, decompressing the space between skin and

muscle (subcutaneous space) that contains nerve endings and blood vessels.

- This decompression promotes improved blood and lymphatic flow into and out of the taped area, promoting more rapid removal of injury waste products and pain-generating chemicals while promoting healing.

MECHANICAL EFFECT

- Tape has longitudinal stretch properties of about 140-180 percent, similar to the stretch properties of skin, muscle, and connective tissue.
- This assists the body's stabilization system by adding a little extra stability, spring, and awareness of stretch to muscles, ligaments, tendons, and joints.
- Kinesiotape may also have a role in restoring normal "slide and glide" mechanics between layers of tissue.

NEUROLOGICAL EFFECT

- The presence of tape on the skin helps to create a non-painful stimulus from the area that, consistent with pain gate theory, makes it more difficult for the nervous to feel pain in that area.
- The decompressive properties of the tape reduce pressure and compression on nerve endings just under the skin, causing them to fire less.
- Tape placed over really tight muscles seems to reduce the response to being stretched, making them feel less tight and sore.
- Tape placed over weak, sore, and injured tissue will act to aid the bodies 'active' stabilization by altering the activity and feedback from nerves in the skin and underlying tissue.


WHO CAN USE IT?

- Kinesiology tape can be worn by almost anyone from children to the elderly.
- It can be used to help almost any pain or dysfunction being caused by the bodies' musculoskeletal system.
- Simple applications are fairly straightforward and easy enough to make a success of with self-application.
- Although the glue is tough and durable. The tape can be removed with very little discomfort and leaves no residue on the skin.
- Because the glue is acrylic and does not contain latex, it can be used by those allergic to most other tapes.

ANY DRAWBACKS?

- Occasionally, it can cause an allergic skin reaction.
- If too much tension is placed on the ends of the tape, it can irritate and inflame the skin.
- It is not a miracle cure. It will not mend broken bones or instantly fix serious injury.
- It does not work like a plaster on a wound. To get maximum effect, the right combination of tape and tissue stretch is vital.

CLINIC BUILDING TIPS:

1. Ask a local running store to allow you to do a 45-minute educational workshop on taping for their clients. By doing so, you will be seen as the expert in your community.
2. Conduct a monthly class in your physical therapy clinic and invite everyone you know. We do this every second Wednesday of the month, no matter what. We ask patients to invite a friend. This event has a high conversion rate because patients can meet us personally, see the clinic and understand what makes us different.
3. Look up all the running events in the next six months within 15 miles of your clinic. Contact the race director to see if you can have a taping booth adjacent to the packet pick-up (typically the day before the race). I have found that taping and talking about the injuries prior to the race has a high conversion rate after the race for athletes who need care but were not sure where to go. 

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