

### TAPING THE WORLD FOR HEALTH™



### Sheryl Goodridge, PT, DPT, CKTI

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- Proper Name: Kinesio<sup>®</sup> Tex Tape. (For use with the Kinesio<sup>®</sup> Taping Method) These are both trademarked.
- Common Term Use: Kinesio<sup>®</sup>, Kinesio<sup>®</sup> Tape, KT

### What is Kinesio® Taping?

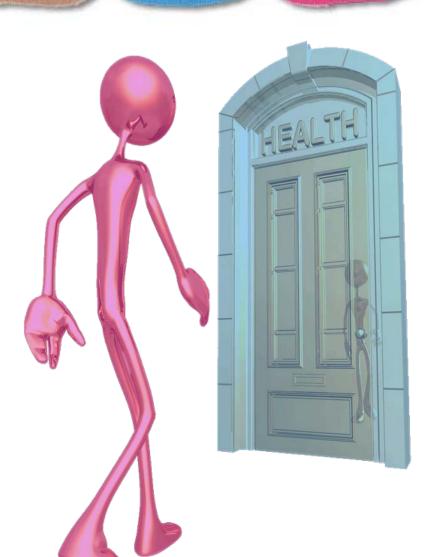


- A time tested, therapeutic taping method
- Uniquely designed elastic tape
- Enhances muscular, joint and circulatory function
- Can be applied and worn 24 hours a day, 3-5 days



### What is Kinesio® Taping?





- Used during rehabilitative and chronic phases of injury
  - acute
  - sub acute
  - rehabilitative
- Preventative
- Return body to Homeostasis

### What is Kinesio® Taping?



- Can be used with other modalities:
  - cryotherapy
  - hydrotherapy
  - manual therapy
  - Electro-stimulation
  - Acupuncture
  - IMS
- Immediate and long term response





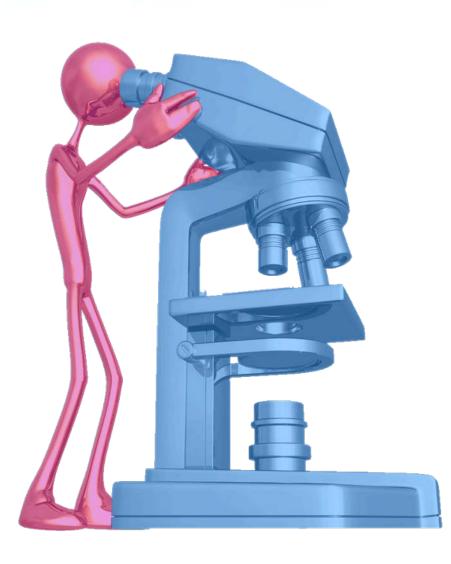


Kenzo Kase, D.C., Founder

Invented the taping method in 1973

Dr. Kase wanted his patients to utilize a "prescription" that they could take home and use between visits.

# History of Kinesio® Taping (\*\*) INESIO® Taping\*\*



- Began experimenting with existing tapes
- Non-desirable results, developed a *new* type of tape
- Kinesio® Taping Method was used in Japan's clinical rehabilitation settings
- International exposure due to use in '88 Seoul Olympics
- Introduced to the USA in 1995

### Kinesio® Taping Today



- 85% of applications are non-athletic
- Professional teams and athletes rely on the unique technique within
  - United States/Canada
  - South America
  - Asia
  - Europe
  - Middle East
  - South Africa
- Introduced into academia as a part of the curriculum



### Practitioners



- Primary markets are PT's, OT's, ATC's, DC's, MD's, LaC, MT's, and RN's
- In 2007, over 51,000 practitioners purchased Kinesio® Tex Tape in the US, with over 150,000 worldwide
- 21 International Partners of Distribution representing over 73 countries around the globe



### What can Kinesio® Tex Tape be used for? Virtually everything...

- **AC** Joint
- **ACL**
- **Achilles Tendonitis**
- **Bicep Tendonitis**
- **Brachial Plexus**
- Carpel Tunnel Syndrome
- **Elbow Bursitis**
- Hallux Valgus
- Headaches
- Medial/Lateral Epicondylitis
- Patella Tendonitis
- **Scoliosis**
- Shin Splints
- And More.....



## Unique Qualities of Kinesio® Tex Tape





- Tape applied to paper substrate with 10% stretch
- Elasticity to 40-60% of resting length
- Stretches along longitudinal axis only.
- Thickness and weight similar to skin
- 100% medical grade, acrylic heat activated adhesive
- No medicinal properties in tape

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## Unique Qualities of Kinesio® Tex Tape





### LATEX FREE!!!!



# Kinesio® Taping Method vs. Other Taping Techniques



- Three main taping techniques recognized within therapeutic communities.
  - Prophylactic Athletic Taping
  - McConnell® Taping Technique
  - Kinesio® Taping Method

# Athletic Taping Athletic Taping Athletic Taping

### Most commonly used technique

- Primary purpose not rehabilitative
- Acute injuries and injury prevention
- Limited wear time
- Skin irritation due to latex adhesive
- Requires pre-tape or spray adhesive
- Compression of the skin, joints, and muscles
- Used to limit or assist motion



## McConnelle Taping Technique



- Bracing or strapping technique (EnduraTape®, LeukoTape®)
- Extremely rigid, cotton mesh tape
- Requires pre-tape
- Limited Uses: primarily orthopedic
- Limited wear time due to skin irritation
- Poor adhesive quality when wet



### Kinesio® Taping Method

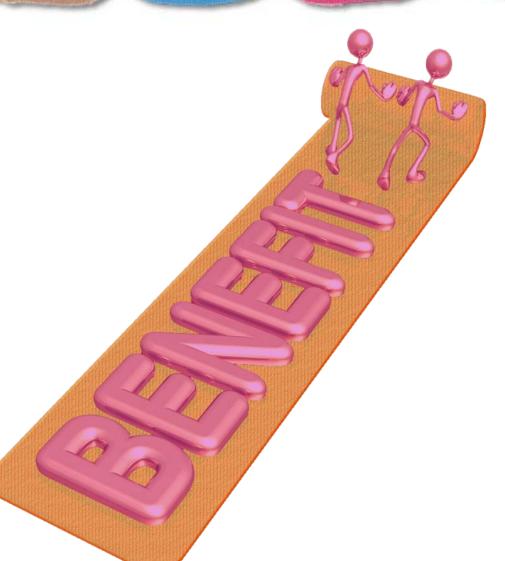


- Latex Free
- Safe for pediatric to geriatric populations
- Longer wear time
- Well tolerated
- Rehabilitative
- Works with the body to allow normal ROM



# Kinesio® Tex Tape





- Enhances the circulatory system via superficial activation
- Restores epidermal tissue homeostasis
- Used worldwide for preventative and clinical conditions

# Unique Benefits of Using the Kinesio® Taping Method

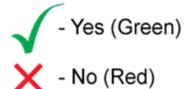


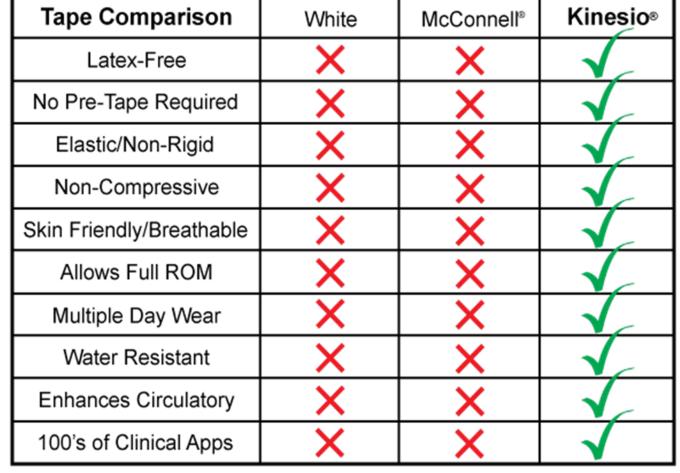
- More Economical
- Easy to Apply
- Water resistance improves wear time
- Application generally lasts 3-5 days
- Effective treatment between professional visits



### Kinesio® Tex Tape















### The Who's Who of Sports









### The Who's Who of Sports









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### United States Postal Service Cycling Team



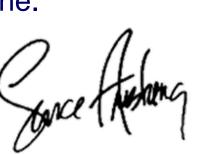


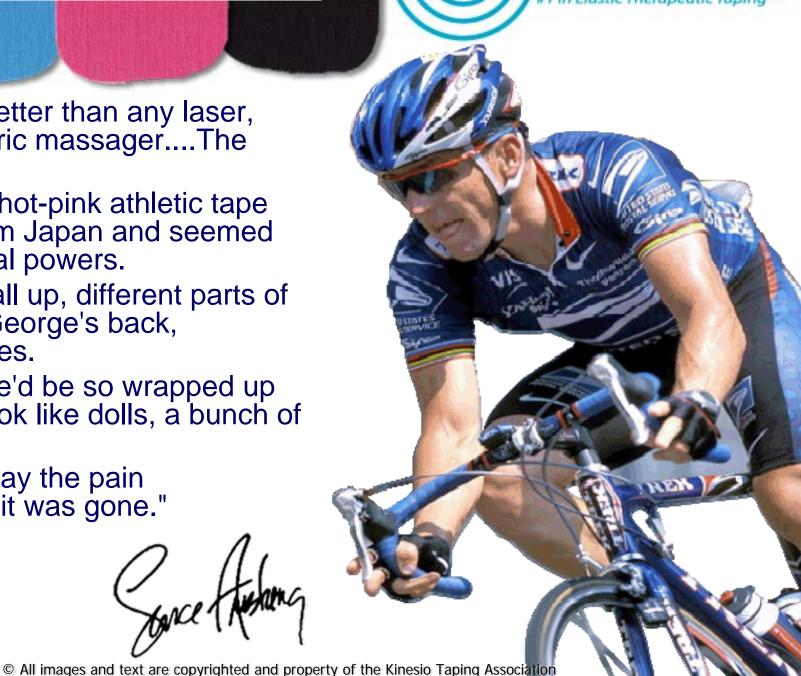
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### Lance Armstrong's **Every Second Counts**

KINESIO®

- "Something better than any laser, wrap, or electric massager....The Tape.
- It is a special hot-pink athletic tape that came from Japan and seemed to have special powers.
- ...tape(d) us all up, different parts of our bodies...George's back, Chechu's knees.
- Sometimes we'd be so wrapped up ...that we'd look like dolls, a bunch of broken dolls.
- But the next day the pain disappeared--it was gone."





## Professional Soccer Leagues







## Over 75% of MLB teams Over 50% of NFL teams





"I am pleased with the results we are receiving from using Kinesio tape. We have used Kinesio tape on a number of lower leg injuries with great results."

Rick Griffin.

(Head Athletic Trainer-Seattle Mariners)

"We have found a multitude of uses for the tape. We have found great results in using the KT for support and stabilization. It definitely helps our players stay on the field."

David Price, (Head Athletic Trainer-NY Jets)

# Five Major Physiological Effects of Kinesio® Taping...On





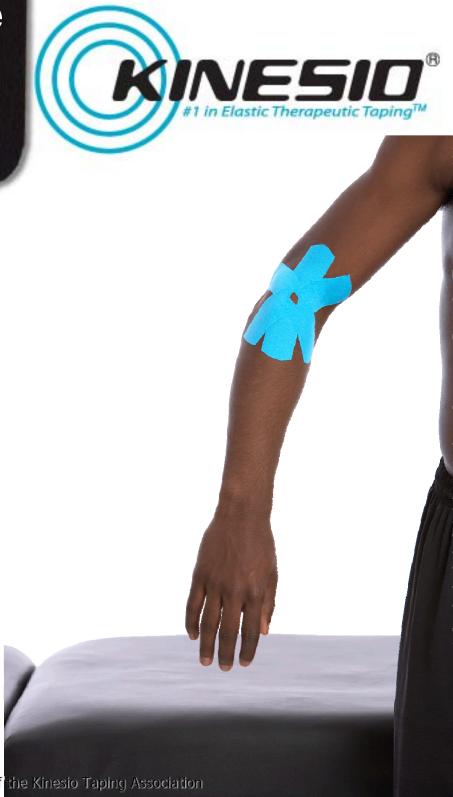


- 1. Skin
- Circulatory/Lymphatic Systems
- 3. Fascia
- 4. Muscle
- 5. Joint

### Kinesio® Tex Tape Effect on the Skin

(Endogenous Analgesic System) (superficial fascia)

- Stimuli to mechanoreceptors of skin
- Decrease inflammation, decrease pressure on mechanical, chemical, proprioceptors and pain receptors



## Circulatory/Lymphatic System



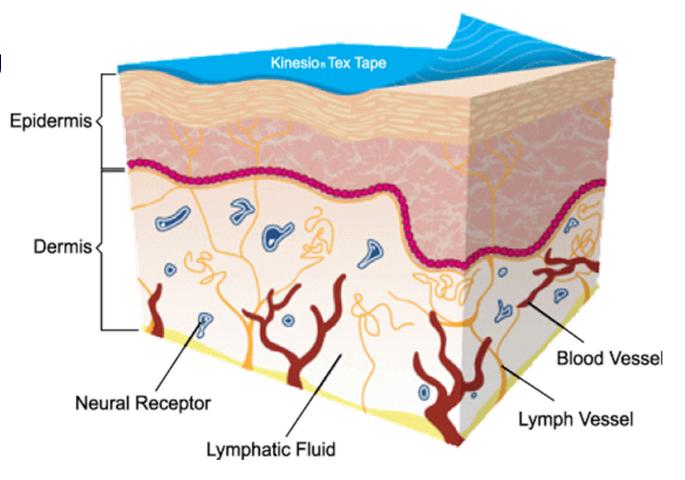
- Increase interstitial lymphatic fluid flow
- Enhance fluid exchange between tissue layers
- Reduce edema
- Equalize temperature

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# Kinesio® Taping Effects on Superficial Lymphatic Drainage



- Lifts the skin, causing convolutions
- Creates channels of low pressure in congested areas
- Decreases pain



# Kinesio® Taping after 12 Hours





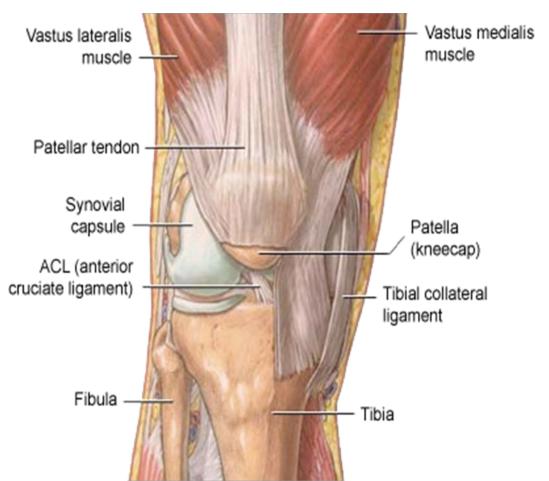
### Muscle



- Relieves pain
- Increases Range of Motion
- May normalize length/tension ratios to create optimal force
- Assists tissue recovery
- Reduces fatigue
- Improves muscle contraction of a weakened muscle (Facilitation)
- Stimulate relaxation of over-contracted muscle (Inhibition)







- Improves joint biomechanics and alignment
- Balances agonist and antagonist
- Reduces protective muscle guarding and pain
- Facilitate ligament & tendon function
- Enhances kinesthetic awareness





photo courtesy of Audrey Yasukawa, OT, CKTI

**Before Taping** 

- Scapula is elevated
- Asymmetry with head, neck and trunk





photo courtesy of Audrey Yasukawa, OT, CKTI

After Taping

#### Look at the changes:

- What was inhibited?
- What was facilitated?
- You cannot tell just from looking at the tape





photo courtesy of Audrey Yasukawa, OT, CKTI

After Taping

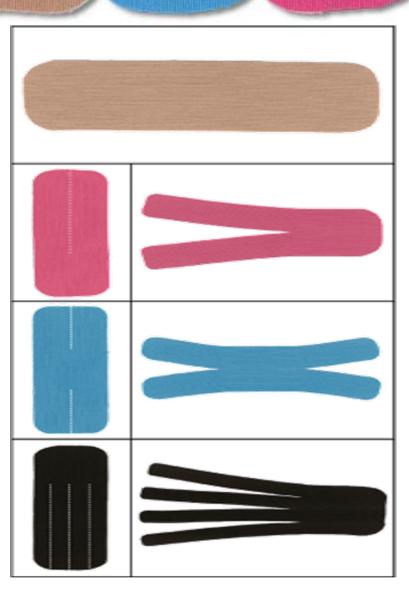
- Lower Trapezius facilitation
- Trunk Extensors to activate and shift weight
- External Rotation to align Humerus



- JOSPT July 2008: The Clinical Efficacy of Kinesio Tape for Shoulder Pain: A Randomized Double-Blinded, Clinical Trial, Thelen, Dauber, Stoneman; volume 38
- JOSPT, July 2009: Short-Term Effects of Cervical Kinesio Taping on Pain and Cervical Range of Motion in Patients With Acute Whiplash Injury: A Randomized Clinical Trial, Gonzales-Iglesias et al.; volume 39

## Application of Kinesio® Taping





- Assess/Screen
- Tape
- Re-assess
- X, I, Y & Fan cuts (the "Y" & "I" cuts are most common)

# Basic Applications Concept



#### D to P (I to O)

Distal → Proximal (Insertion to Origin)

To inhibit overused muscle- Acute conditions, muscle spasm

15% to 25% tension

P to D (O to I)

Proximal → Distal (Origin to Insertion)

To facilitate weak muscle-chronic conditions, rehabilitation

15% to 50% tension

Therapeutic Direction is the recoil of the tape toward the anchor Therapeutic Zone is the targeted tissue

# Application of Kinesio® Taping





- Kinesio® Tex tape is generally applied to stretched tissue, with appropriate stretch added manually when patient cannot stretch
- Less is More
- No tension on the anchors

# Kinesio® Taping Vocabulary



- "Paper Off Tension" Tape is applied with the 10-15% tension off the substrate
- P to D (O to I) applied with 15% 50% tension
   Proximal to Distal (Origin to Insertion)
- D to P (I to O) applied with 15%-25% tension
   Distal to Proximal (Insertion to Origin)
- Tensions greater than 50% are for Corrective techniques only (KT2)

# Application of Kinesio® Taping



- Skin should be free of oils and dry
- After application, lightly rub the tape to activate the heat sensitive adhesive
- Tape application in moist areas or prior to swimming or sports: apply 30-40 minutes prior to activity
- Tape both the pain, and cause of the pain

# Limitations of Kinesio® Taping



- Body hair needs to be clipped or shaved
- Apply tape approx. 30 minutes before activity
- Application during activity, may require the use of a tape adherent
- Patient education is important component to success of application

## Removal Of Kinesio® Tex Tape



- Remove in direction of hair growth
- Roll the tape off using the base of the hand to brush/ pat skin gently to reduce discomfort

## Removal Of Kinesio® Tex Tape



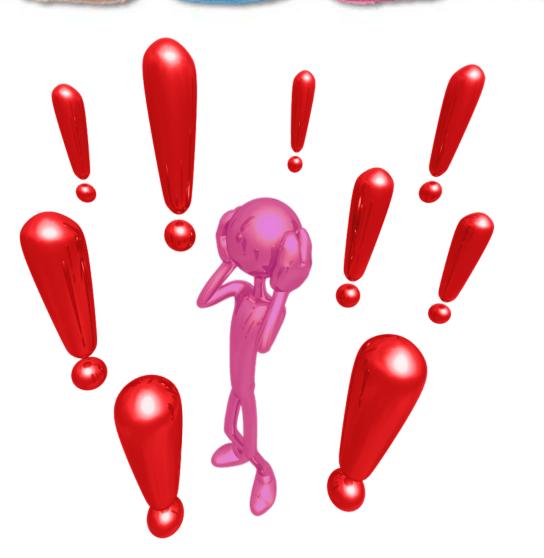


"Skin from tape" method:

- Pull the skin back from the tape
- Tape may be removed while bathing
- Soap, hand lotion or oil (baby or mineral) may be applied to the tape to break the adhesive bonds comfortably

# Initial Difficulties with Kinesio® Taping Method



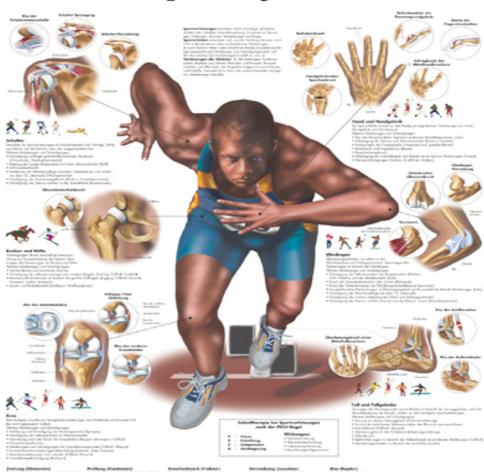


- Unlearn traditional athletic tape application methods
- Proper patient assessment is critical
- Taping for neurological and lymphatic as well as orthopedic conditions



VEGLER

#### **Sports Injuries**



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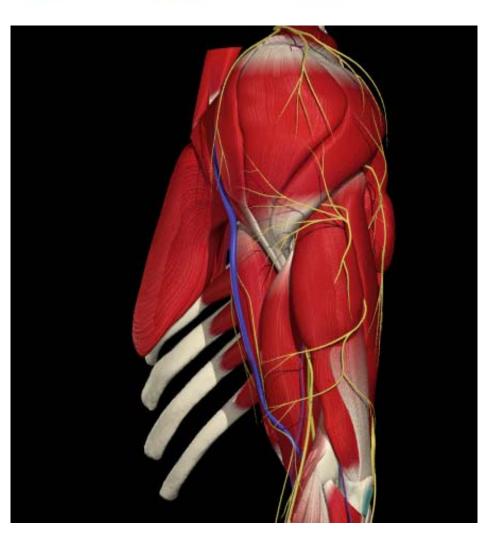
### Let's Start Taping!





- Deltoid
- Rotator Cuff Impingement
- Trapezius
- Sacrospinalis
- Erector Spinae
   Muscle Strain
   Lumbar, corrective
   tape
- Quadriceps
- Patella tendinitis





- The deltoid muscle being the major muscle in external rotation, internal rotation and abduction of the humerus, is composed of anterior, middle and posterior fibers.
- Clinical Applications. Acute and chronic Shoulder Injuries, AC Injuries
- Tape Specs. 2" width, Y-Shaped Tape

## KT Deltoid Application

WE510 ®
#1 in Elastic Therapeutic Taping™

- Measure and cut "Y" tape
- Position: Flex Elbow, Shoulder to 90\*
- Adhere anchor of "Y" to deltoid tuberosity
- Activate the glue
- Position: Horizontal ABDuction
- 15-25% tension. D to P (I to O)
- Follow anterior deltoid
- Attach end to lateral clavicle
- Activate the glue



## KT Deltoid Application

WE510 ®
#1 in Elastic Therapeutic Taping™

- Position: Horizontal ADDuction
- 15-25% tension
- Posterior tail along posterior deltoid
- Attach end at lateral edge of spine of scapula
- Activate adhesive



### KT Deltoid Lab

WESID\*
#1 in Elastic Therapeutic Taping TM

- Completed taping
- Y strip
- D to P (I to O)
- 15-25% tension
- Inhibition







- supraspinatus muscle taping from insertion to origin. This application should be applied first as it is the primary tissue to be treated.
- Place the base of the Kinesio® Y strip two inches below the greater tuberosity of the humerus, with no tension.

### Rotator Cuff Impin or Tendonitis, o





- Have the patient move into shoulder adduction behind the back, with lateral neck flexion.
- Apply light or paper off tension (15-25%) to the tails of the Kinesio® Y strip. The superior tail should follow superior to the spine of the scapula, approximately the junction between the upper trapezius muscles and supraspinatus ending at the superior medial border
- The inferior tail should follow along the spine of the scapula. Lay the distal 1 to 2 inches down with no tension





- Application of the deltoid muscle taping from insertion to origin. All three portions are being taped as a group.
- The practitioner may select to tape the muscles separately.
- Place the base of the Kinesio® Y strip two inches below the deltoid tuberosity of the humerus, with no tension and proceed per deltoid application.





- Place the base of a 6-8 inch long Kinesio® Y strip on the anterior aspect of the shoulder in the area of the coracoid process, with no tension. The base can be adjusted to place the cut of the Y directly below the region of pain.
- One hand should hold the base to ensure no tension is added.
- Apply moderate tension with downward pressure surrounding the area of pain





- When approximately 1/2 of the Kinesio® Y strip has been applied, slide the hand which was holding the base up to the point of end tension on the Kinesio® Tex Tape.
- Have the patient move into shoulder flexion with horizontal flexion.
- Apply the tails of the Kinesio® Y strip, with no tension, in a splayed out pattern to dissipate the created force.
- Initiate glue activation prior to any further patient movement.





 Completed rotator cuff impingement or tendonitis Kinesio Taping® Method application.

# Trapezius (Restic Therapeutic Taping The Partie of the Par





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#### Function

The Trapezius muscle is comprised of 3 sections, the upper, middle and lower fibers. We will concentrate today on the middle trapezius. The middle fiber of the trapezius assists in adduction while the lower fibers help in rotation, depression, and adduction of the arm. If the middle trapezius becomes weak, then as the upper limb is raised the scapula slips laterally. When the lower trapezius is not working, then the arm can not be raised in flexion without substitution patterns.

# KT Middle Trapezius Application





- Measure and cut "Y" Tape
- Adhere Anchor of the Y-shaped tape under the acromion process
- Activate adhesive

# KT Middle Trapezius Application





- Position: Flex the elbow to 90 degrees and reach upper arm horizontally
- 15-25% tension. D to P (I to O)
- Apply each tail individually along the muscle with approx. a 5 degree angle

# KT Middle Trapezius Application





- The Ends of "Y" tape are fixed on approximately T1 and T5
- Ends with no tension
- Activate Adhesive

## KT Middle Trapezius Application Lab

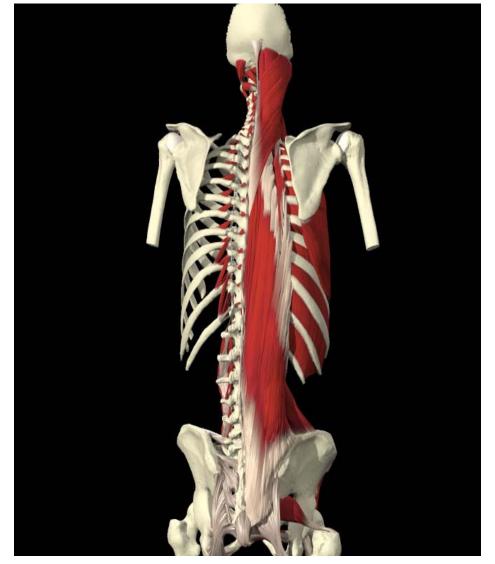




- Middle trapezius tape while arm and body is in neutral position. Note upper trapezius I strip
- Completed taping
- Y Strip
- D to P (I to O)
- 15-25% tension
- Inhibition; may be taped for facilitation as well

# Sacrospinalis WINESID®

- The sacrospinalis is the generic term of the erector spinae in the thoracic and lumbar regions.
- Anterior member of the erector spinae group is the iliocostalis which, while being insufficient on its own to move the body forward or to maintain an erect posture, is very strong in resistance to extension, hyperextension and lateral flexion.



# KT Sacrospinalis Application





- Position: The patient stands
- Measure and cut "Y" tape
- Adhere the anchor (origin of "Y" tape) over the center of the sacrum
- Activate the adhesive

# KT Sacrospinalis Application





- Position: Patient gradually flexes forward within comfort
- 15-50% tension . P to D (O To I)
- Adhere one end of the "Y" tape along the erector spinae muscle
- No tension on ends
- Activate the adhesive

# KT Sacrospinalis Application





- Keeping a 5 degree angle within the valley of the "Y" tape, adhere the opposite tail along the other side in the same manner as the previous one.
- No tension on ends
- Activate the adhesive

## KT Sacrospinalis Lab





- Completed taping
- Sacrospinalis tape when body is in a neutral, standing position
- Y strip
- P To D (O To I)
- 15-50% tension
- Facilitation



- This muscle group provides vertebral stabilization and can become injured as a result of sudden overload, possibly in extension, weak muscles, trunk rotation and may be associated with lumbar intervertebral disk herniation.
- The Kinesio Taping technique will assist in reducing acute or chronic muscle spasms, edema, and pain.





- Measure from crest of sacrum (SI) to approximately T12
- Cut 2 lengths of Kinesio<sup>®</sup> Tex tape. The Kinesio I-strips will be placed along the erector spinae muscles





 Begin by placing the patient in a forward bent position



- Position: Lumbar spine flexion with sidebend to opposite side
- Apply Kinesio<sup>®</sup> I Strip to the skin by pulling the paper backing off while guiding the tape onto skin
- Use only "paper off tension" over the musculature





- Activate adhesive by rubbing the Kinesio<sup>®</sup> Tex I strip prior to any movement
- End at T12-L1
- The end will be applied with no tension
- Rub until you begin to feel warmth

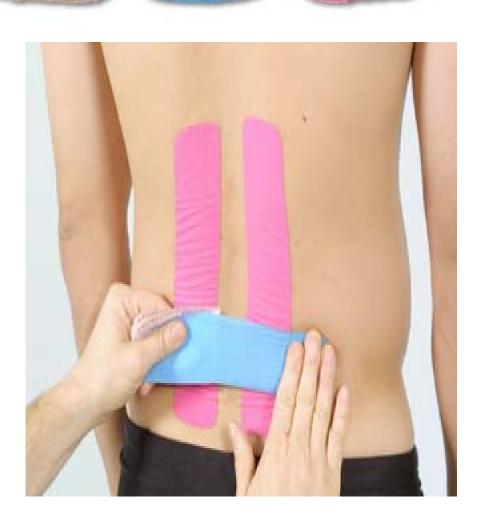


- Apply second Kinesio<sup>®</sup> I Strip on the right by repeating these steps:
- Apply anchor with no tension
- Position patient into lumbar flexion and sidebend as tolerated
- Apply with "paper off tension"
- End applied with no tension
- Rub to activate adhesive prior to movement

- Anchor at SI area
- Paper-off tension
- End at T12-L1
- Rub to activate the adhesive
- Don't rub against the edge of the tape







- Position: Lumbar spine flexion
- Measure and cut I tape
- 25-50% Tension, Space Correction
- Begin by tearing a Kinesio "I" strip in the middle
- Using 25-50% stretch, apply tape directly over the region of greatest pain or spasm



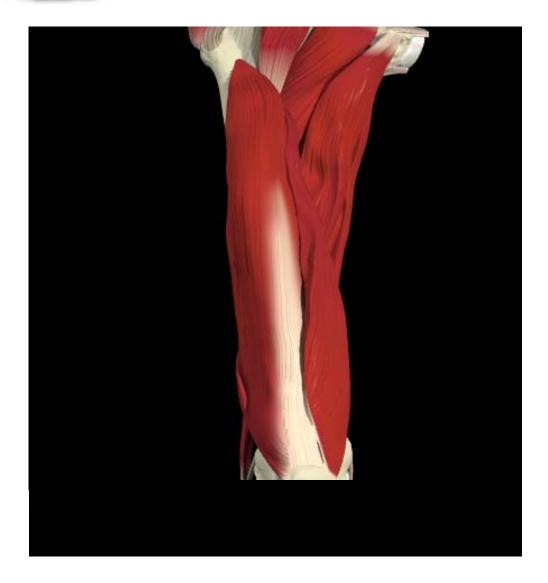


- Completed Taping
- Erector Spinae Muscle Group
- Two erector "I" Strips
- P to D (O to I) Facilitation
- Paper off Tension
- Space Correction
- "I" Strip
- 25-50% Tension in the middle over region of pain or spasm
- No tension on the ends

### Quadriceps Femoris

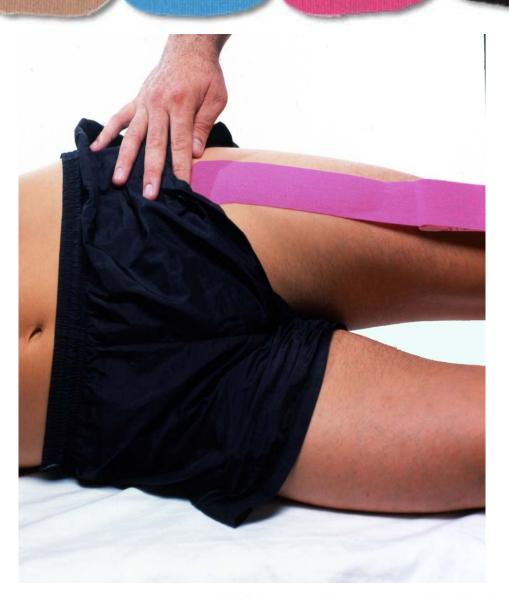


- The quadriceps femoris, the strong extensor of the knee, is made up of four muscles, namely the rectus femoris, vastus lateralis, intermedius and medialis.
- Within this group only the rectus femoris traverses two joints.
   This muscle works in flexion of the hip.



# KT Quadriceps Femoris Application





- Position: Supine the knee extended
- Measure and cut "Y" tape
- 15-50% tension P to D (O to I)
- Adhere the base of the tape to the belly of quadriceps femoris and line tape towards patella
- Activate Adhesive

# KT Quadriceps Femoris Application





- 15-50% tension P to D (O to I), knee bent over edge of table
- Separate the two branches of the "Y" tails
- Gradually flex the knee and at maximum flexion affix the tape around the patella
- Activate the adhesive

# KT Quadriceps Femoris Application Lab





- Quadriceps femoris tape while patient is in standing position and slightly flexed at the knee
- Complete taping
- Y strip
- P to D ( O to I)
- 15-50% tension
- Facilitation



- Patella tendonitis and/or tracking will be using two techniques to gain the desired results.
- One of the most common conditions KT practitioners utilize.
- The KT Technique will reduce edema, pain, and allow full ROM, while offering the patient the support they are seeking.





- Begin with the basic Quadriceps
   Femoris taping we discussed but
   bring the split to the superior edge of
   patella
- Activate adhesive





- Place anchor of the "Y" strip just below the tibial tuberosity
- Position: Have patient place knee in 30 degrees flexion or greater if tolerated
- Place tails of "Y" strip with at least 25-50% stretch around the patella, with strips ending approximately near medial/lateral vastus muscles





- Ends with no tension
- Activate Adhesive
- Completed Taping

### Kinesio® Products



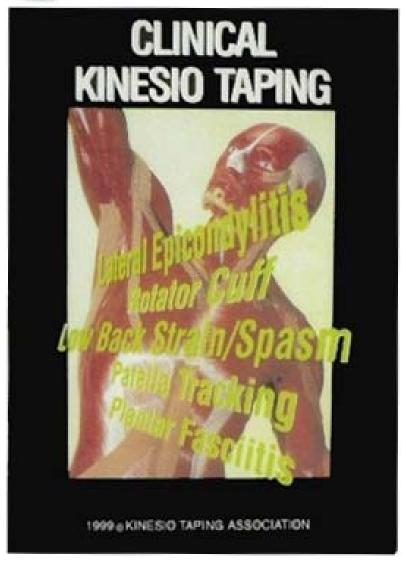




- Currently, Kinesio Tex Tape comes in Beige, Blue, Pink, and Black
- Please note that the pink is commonly listed as "RED"
- There is no difference in the colors other than the color itself. Color Therapy
- All color is added from plant extracts,
   which add to the hypoallergenic properties
- Bulk rolls now come in color as well

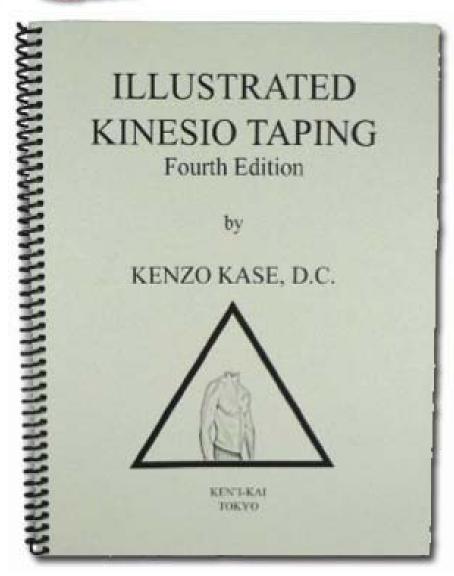






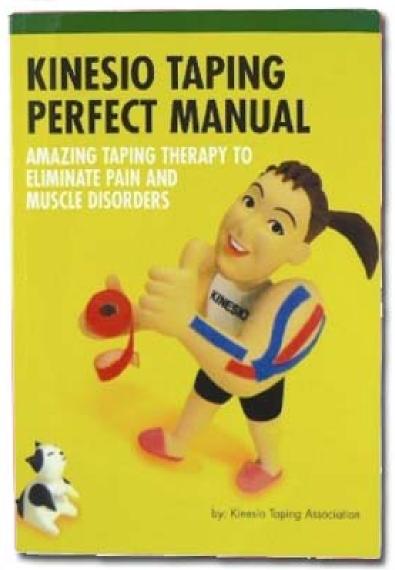
#### **Illustrated Manual**





#### **Perfect Manual**

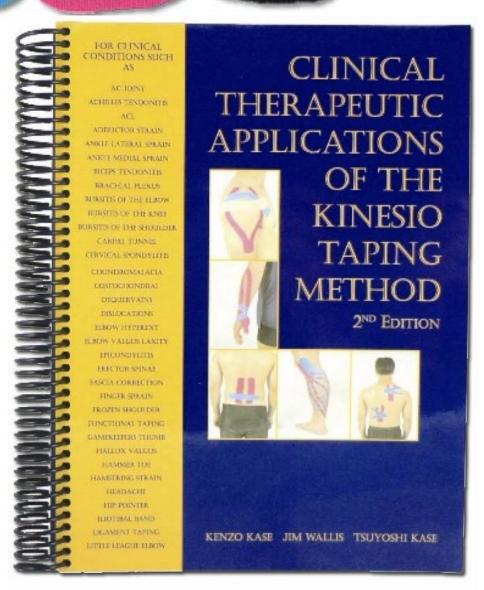




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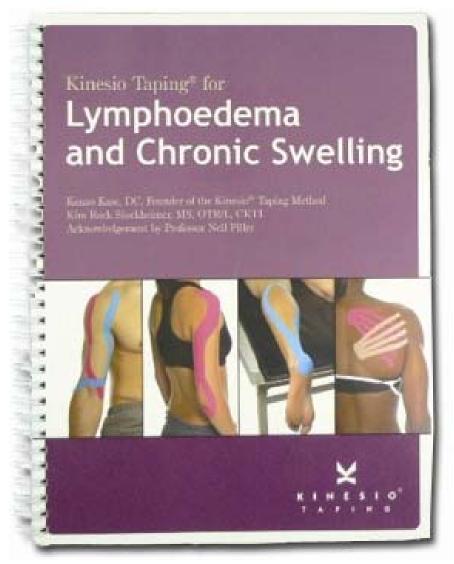
#### Clinical Manual





#### Lymphoedema Manual

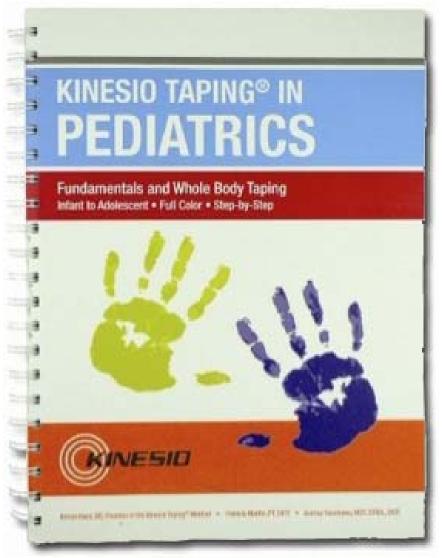




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#### **Pediatrics Manual**





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- Order the books and video
- Take a Kinesio<sup>®</sup> Taping Certification
   Course to become certified
- Courses are listed on the Kinesio<sup>®</sup>
   Taping website <u>www.kinesiotaping.com</u>
- Database Access
- Health Care Professionals can also be referred to Jason Bates, Education Coordinator at 309-932-2777 or 309-883-1214 cell phone.

jbates@kinesiotaping.com

### Certification Courses & Seminars

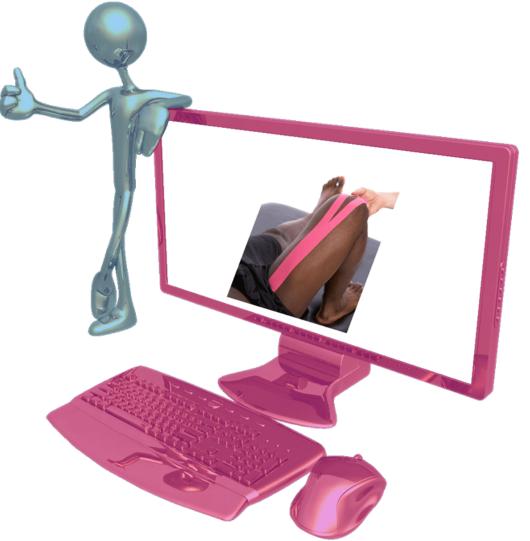




- Presentations
- Kinesio<sup>®</sup> Taping Association Certification Courses
- Kinesio® Taping Association Approved Independent Courses

# KTAI Database Website Website Wine Elastic Therapeutic Taping The Company of th

http://www.kinesiotex.com/portal







- Index of muscles
  - MMT
  - Matrix/response & recommendations
  - Taping application
  - Video
- Division Search
- Symptom Search
- Screenings

