

Therapy Update for Our Referring Providers

New Treatment Technique

Introduced at Renaissance PT

Active Isolated Stretching

Developed over the last 25 years by Aaron Mattes, MS, RKT, LMT, Active Isolated Stretching (AIS) is a unique treatment approach that re-defines the way improving flexibility is done. Conventional thinking dictates that a stretch is held passively and must be held statically to improve tissue length. AIS effectively lengthens tissue (muscle and fascia) making use of short hold-times and active participation of the patient during the treatment.

Electro-myographic studies demonstrate that the myofascial system's protective stretch reflex is triggered when tissue is held in a lengthened position, at or near end range, for greater than two seconds. With AIS, the impact of the stretch reflex is limited by limiting stretch hold times to only 1.5 to two seconds. Tissue is effectively lengthened by performing multiple repetitions. Below are two lists contrasting the differences between conventional stretching and AIS.

Conventional Stretching

- Static hold facilitates protective stretch reflex causing tissue to shorten - inconsistent with trying to lengthen tissue
- Static hold creates ischemic condition in tissue being lengthened as blood is squeezed from muscle tissue under tension during stretch
- Conventional stretching does not typically make use of adding rotary components to limb and trunk segments to adequately lengthen the oblique fascial planes found in body segments

Active Isolated Stretching

- Makes use of hold times of only 1.5 to two seconds to limit impact of stretch reflex
- Shorter hold time not only avoids tissue ischemia but facilitates vascular flushing of tissue as tissue is alternately brought to end range and released from end range, repetitively, during the exercise
- Increases tissue length not only in linear planes but also in oblique planes by adding rotary components to body segments during treatment
- Makes use of **reciprocal inhibition** to facilitate better relaxation of muscle and fascia targeted for lengthening, i.e. patient actively contracts quadriceps and hip flexors to reciprocally inhibit hamstrings and gluteals when stretching posterior thigh tissue.

The AIS technique is easily adapted for use in home exercise programs with adequate patient education and training. It is an effective part of treatment in all muscular-skeletal conditions from plantar fasciitis to cervical headaches.

To learn more about **Active Isolated Stretching (AIS)** or for a demonstration, please contact Renaissance Physical Therapy at 206-361-2225. For additional information on AIS and Aaron Mattes, visit www.stretchingusa.com.

RENAISSANCE
Physical Therapy