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Wellbeing 360°

A virtual mind and body expo

Overuse Injuries

Scott Fuller, DC
Monique Dzendzera, DPT, OCS

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Scott Fuller, DC

Chiropractor

Scott has been a Chiropractor for nine years and working with Premise Health for the last four years. Currently, Scott works at the Intel Health for Life Center in Oregon. When working with patients, he tries to emphasize a person-centered approach towards patient self-efficacy and independence. Instead of asking what's the matter with you, he wants to know what matters to you. Outside of work Scott enjoys traveling, running his huskies, and other outdoor activities with his family.

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Monique Dzendzera, DPT, OCS

Physical Therapist

Monique has been a physical therapist and orthopedic certified specialist for eight years, and currently provides musculoskeletal services for BNY Mellon in New York City. Her specialties include the treatment of sports injuries, orthopedic impairments, vestibular and balance disorders for adults across the lifespan. In her free time, she enjoys traveling and spending time outdoors with her family.

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Session Disclaimer

This program is provided to you by Premise Health to support your overall wellbeing. Educational programs such as the one that follows are introductory in nature and are meant to encourage your further exploration and conversation with your provider. It is not a substitute for that relationship. You should consult the appropriate healthcare professional should you have a condition that warrants medical attention or advice and support.

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Description

- Whether you are a runner, walker, class-goer, weightlifter, or a worker whose job includes repetitious movements, overuse injuries find us all.

- This session will cover what can cause overuse injuries, corrective exercises to address common injuries, and when it's time to call in support.

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Why Adults Need Recess Too

A Reframed Approach to Overuse Injuries

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It's 5 PM ...

Office workers

- Are you sitting most of the day?
- How do you feel after hours of sitting?
- Do you feel sore by the end of the day?
- Are you moving too little during the day?

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It's Saturday morning ...

Weekend warriors

- Do you ever experience spontaneous knee pain?
- Is there a genetic component to your pain?
- Can you control your pain?

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What are overuse injuries?

- Repetitive motions
- Too much movement
- Too little movement

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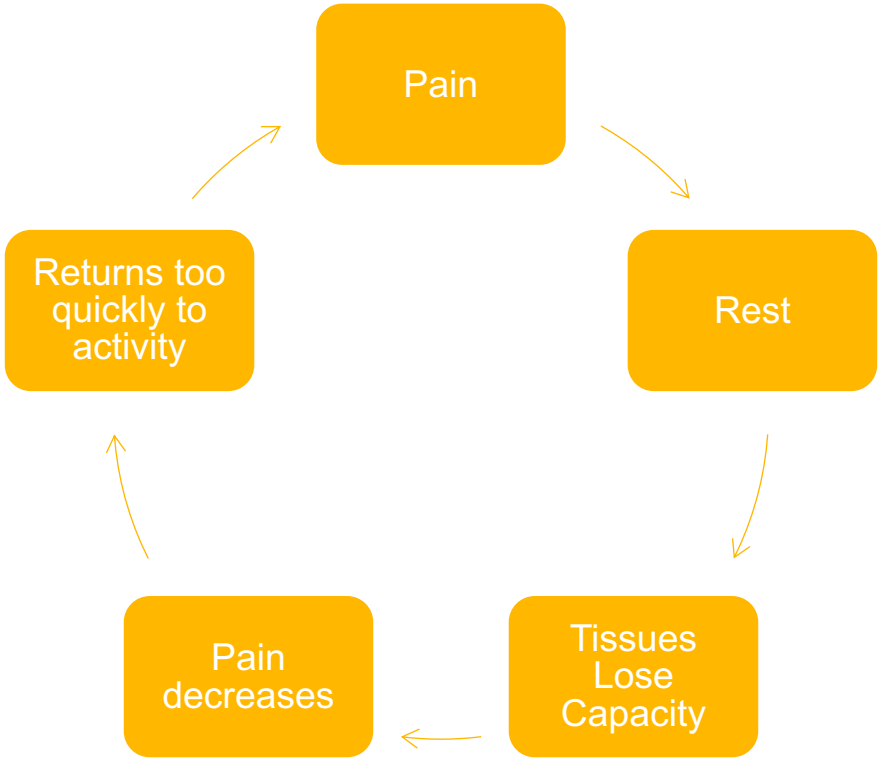
Traditional way to treat Overuse Injuries



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Movement Challenge

Lunge-Hold for 45 seconds

High-Knee March for 30 seconds

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Lack of Movement

- Current healthcare landscape
- Transition to work from home
- Recent pandemic
- Current trends
- Statistics

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Why Does Sitting Hurt?

- Too little movement
- Poor circulation through the limbs
- Foggy brain with decreased mental clarity
- Inflexible spine and hips leading to stiffness
- Poor posture creating abnormal tightness in spinal muscles

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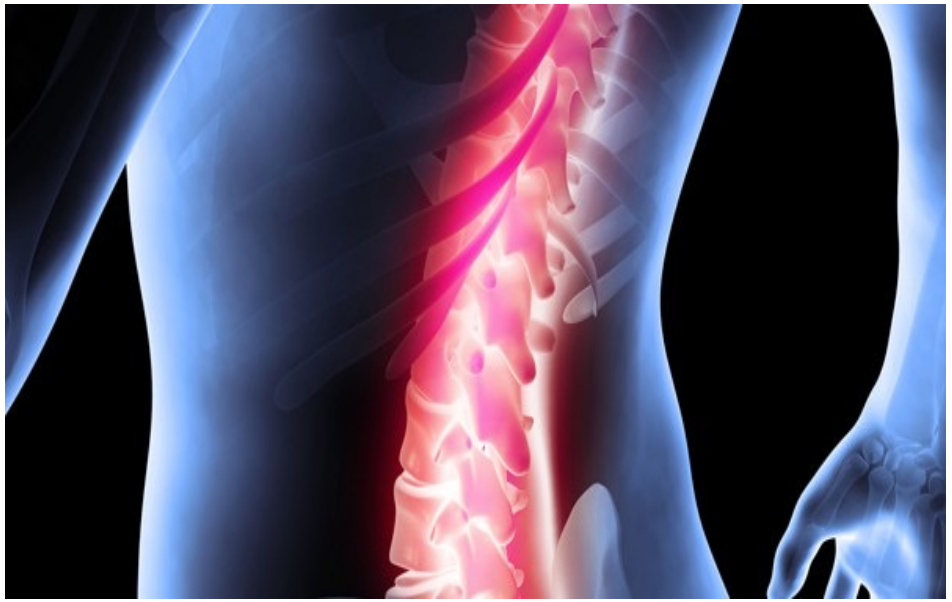
Low Back Pain from Sitting

- Slumped seated posture
- Inadequate low back support
- Improper chair specs
- Muscle fatigue and weakness from lack of movement
- Stiffness from improper body mechanics and poor positioning



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Low Back Pain from Sitting

- How do I correct this?
- Seated or standing posture at the work desk
- Ergonomic chair
- Proper back supports
- Exercises for spine and hip health

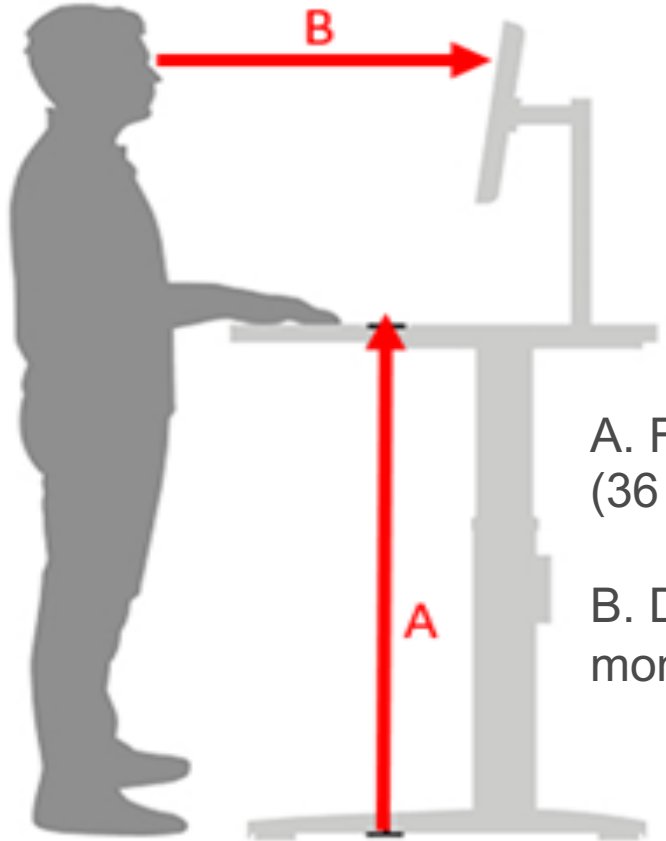

Image by United States Department of Labor: www.OSHA.gov

A. Floor to desk (36 - 46.5")

B. Distance from eyes to monitor (20 – 30")

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Low Back Pain from Sitting

- Low Back Exercises
- Cat Cows
- Spinal Rotation Stretch
- Bird-dog
- Hip Flexor Stretch

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Neck and Upper Back Pain from Sitting

- Rounded shoulders and upper back
- Over-reaching at the computer
- Forward head posture
- Straining the eyes
- Hunching the shoulders

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Neck and Upper Back Pain from Sitting

- How do I correct this?
- Upper body posture at the work desk
- Adjustment of your monitor screens
- Proper supports for the arms
- Corrective exercises for the neck and upper back

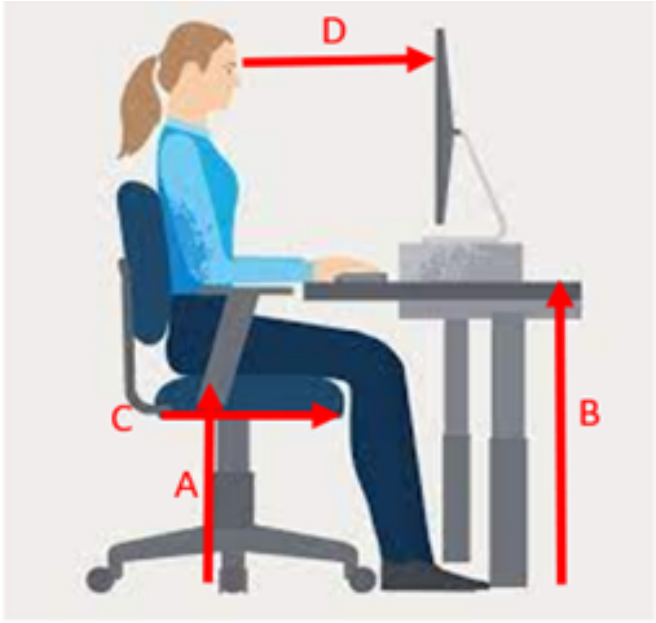
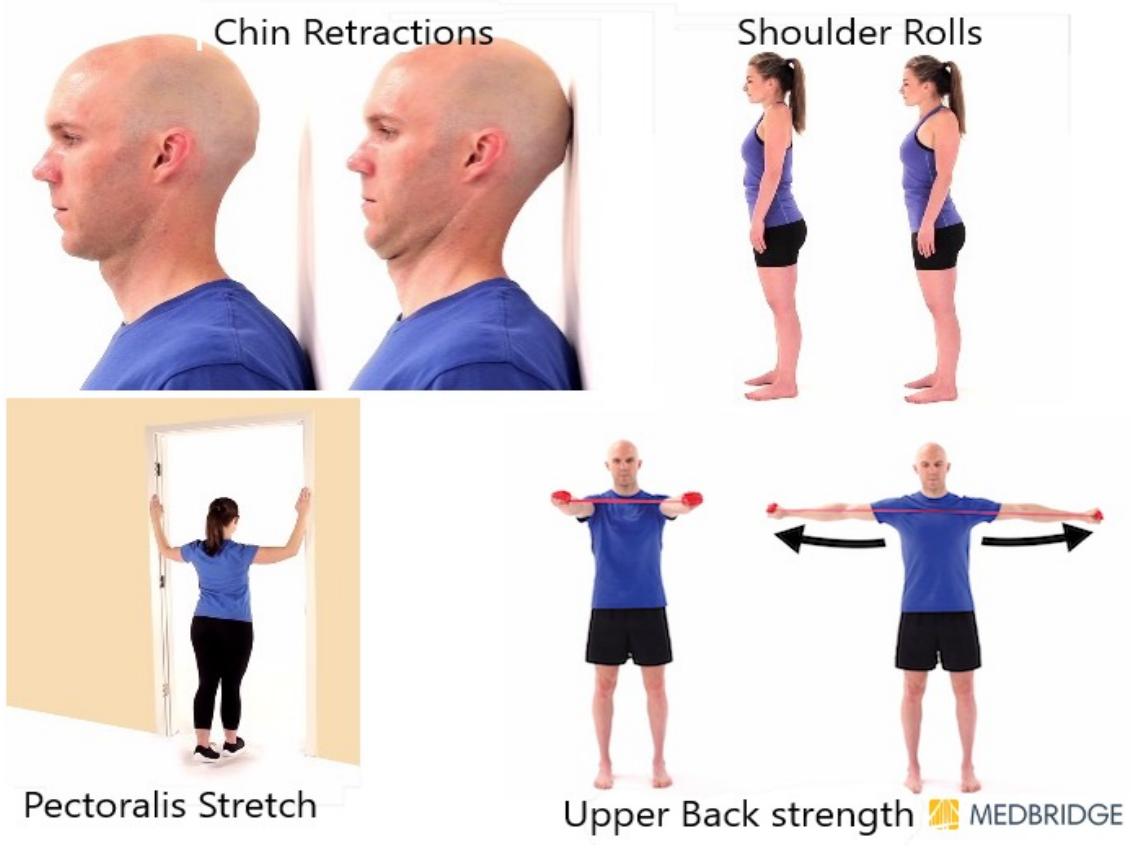


Image by United States Department of Labor: www.OSHA.gov

A. Height of seat chair (15 – 22")
B. Height of desk (22 – 30")
C. Seat pan depth (15 – 17")
D. Distance from eyes to monitor (20 – 28")

Neck and Upper Back Pain from Sitting



Neck and Upper Back Exercises

- Chin Retractions
- Shoulder Rolls
- Pec Stretches
- Upper Back Strengthening

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Repetitive Movements

How can too much movement hurt?

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Repetitive Movements in the Work Setting

- Assembly-line environments
- Vibrations
- Repetitive bending, twisting, and lifting
- Improper lifting techniques
- Lack of preparation for work demands
- Muscular fatigue

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Repetitive Movements in the Work Setting

Management Strategies

- Educate employees on proper bending and lifting techniques.
- Rotate stations.
- Take rest breaks from repetitive tasks.
- Get adequate sleep.
- Keep your mind alert and body strong for required tasks.

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Common Outdoor and Gym Injuries

Affects runners, walkers, cyclists, and gym-goers

Injuries of ambulation

- Iliotibial Band (ITB) Syndrome
- Shin Splints or Medial Tibial Stress Syndrome
- Runner's Knee or Patellofemoral Pain Syndrome

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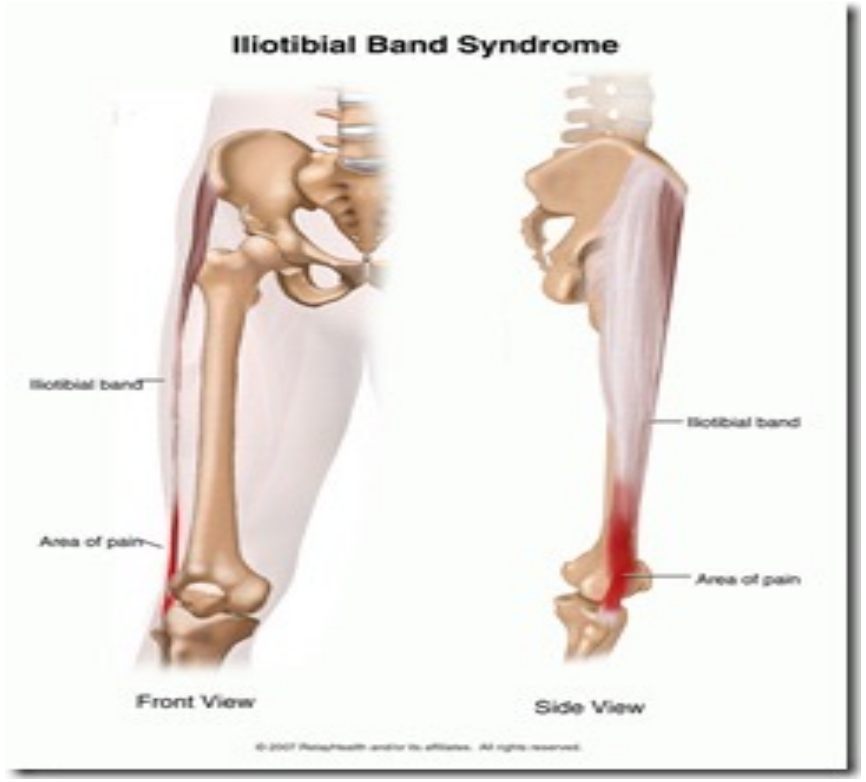
Iliotibial Band (ITB) Syndrome

- Clinical Presentation: Outer hip, thigh, and/or knee pain with running
- Anatomy: Composed of the TFL and Gluteus Maximus muscle groups
- Frequency: Affects 5-14% of all runners
- Etiology: Compression from increased volume or downhill activities



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Iliotibial Band (ITB) Syndrome

Side-lying loading

Linear Loading

Lateral Loading

Management Strategies

- Walking uphill on treadmill
- Progressive side loading (side plank variations)
- Progressive linear loading (lunge variations)
- Progressive lateral loading (lateral lunge variations)
- Increased step cadence with running

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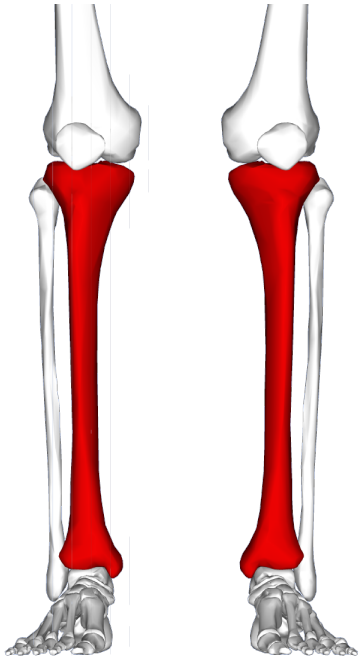
Shin Splints or Medial Tibial Stress Syndrome

- Clinical Presentation: Dull pain on the inner border of the shin bone
- Anatomy: Lower leg muscles that attach to the shin bone
- Frequency: Prevalence of 9.5% of all runners
- Etiology: Anterior and posterior muscle imbalances



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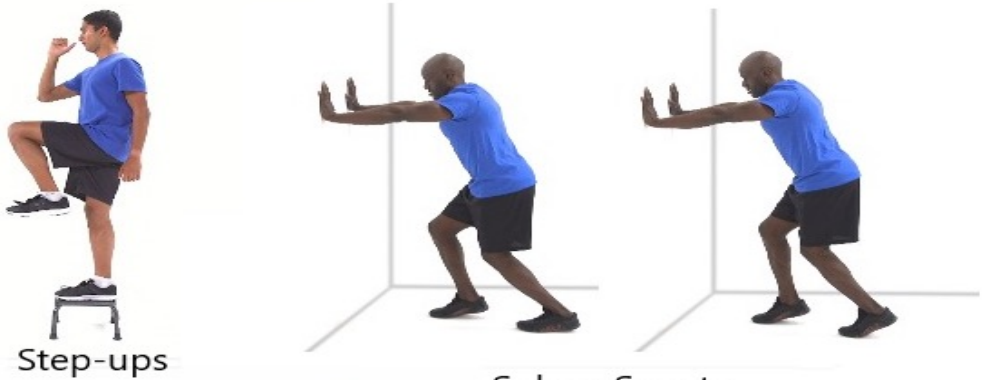
Shin Splints or Medial Tibial Stress Syndrome



Management Strategies

- Reduce painful activity
- Step-ups
- Soleus Squat
- Calf raises
- Side-lying hip abduction
- Proper reintroduction of painful activity

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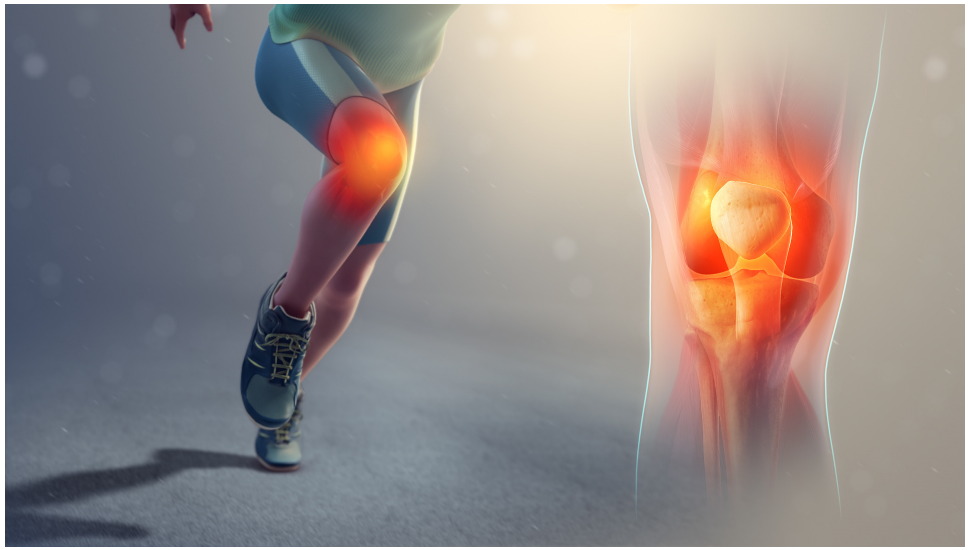
Runner's Knee or Patellofemoral Pain Syndrome

- Clinical Presentation: Pain located around the kneecap
- Anatomy: The patella abnormally moves through the femoral groove
- Frequency: 22.7% of the general population
- Etiology: Irritation of the patellofemoral joint



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Runner's Knee or Patellofemoral Pain Syndrome

Straight leg raise

Squat with band around knees

Single-leg squats

Management Strategies

- Passive stretching of the hamstring, quads, hip flexors, calf
- Supine straight leg raises
- Side-lying leg raises
- Standing squats with band around knees
- Lunges in place
- Single-leg squats

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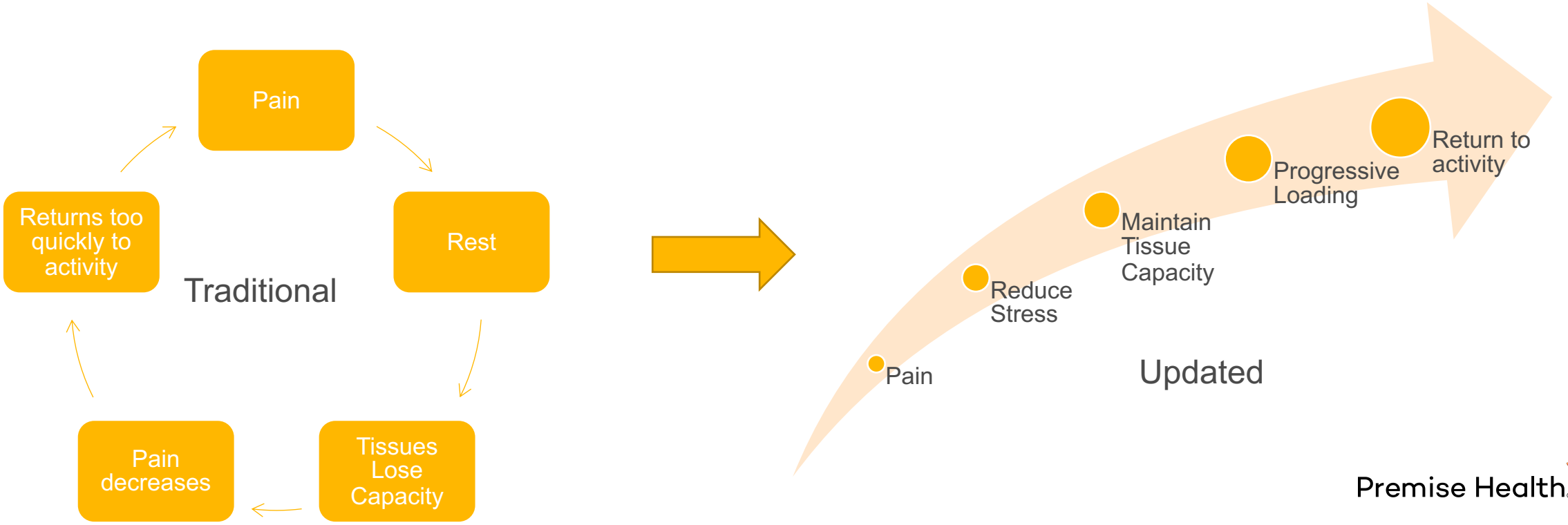
A Reframed Approach to Overuse Injuries



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Overuse Injuries: Tips for Prevention

How can I prevent these injuries?

- Start with a comfortable pace and increase in safe increments
- Stretch when your muscles are warm
- Wear proper activity attire
  - Supportive socks and sneakers
- Sneaker tread checks
  - Every 3-6 months for runners
  - Every 6-12 months for walkers

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Overuse Injuries: Stretches for Prevention

Calf Stretch

Achilles Stretch

Hamstring Stretch

ITB Stretch

Hip Flexor Stretch

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Favorite stretches for prevention:

- Standing Calf Stretch
- Achilles Tendon / Lower Calf Stretch
- Hamstring Stretch
- ITB Stretch (standing or with stretch strap)
- Hip Flexor / Quadricep Stretch

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The Delicate Balance of Movement

Find your movement equilibrium to prevent overuse injuries.

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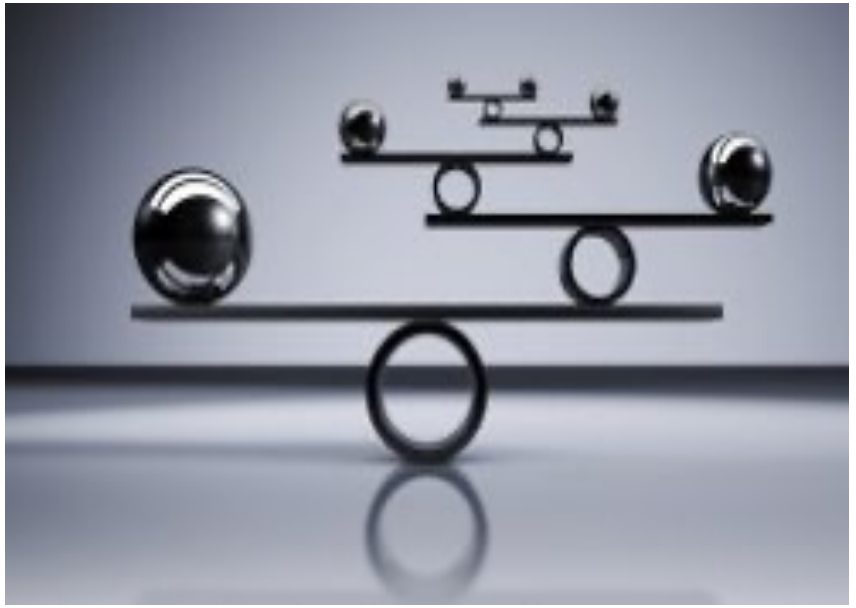
Balancing Modes of Movement

- Alternate your workouts.
- Choose 1 or 2 endurance-based favorites for heart health.
- Incorporate strength training for bone and muscle health.
- Try a down-regulating activity.
- Add a post-workout stretch routine.
- Enjoy your rest days.



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How can Premise Health help?

- Proactive approach
- Prevention education
- Seminars and workshops
- Individual sessions
- Whole body systems approach
- Tailored musculoskeletal care

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Thank you for attending.

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