

# Understanding “Alternative” Therapies Your Patients Are Using

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# Disclosure

I have no actual or potential conflict of interest in relation to this presentation.

# Goals and Objectives

1. Understand the evidence for health benefits of selected therapies, particularly related to sports medicine.
2. Review the mechanism of action for the health benefits of selected therapies, when available.
3. Review the benefits of selected therapies on certain diseases.

“ WHAT  
SERVICES DO  
YOU OFFER? ”



# Compression Therapy

A photograph of a person lying on their back on a massage table, wearing a striped tank top and dark pants. They are connected to a black compression therapy machine with tubes and straps. The background is a soft, out-of-focus blue.

STARTS AT

**Compression Therapy \$35**

Decrease the burn from over worked muscles and replenish with oxygen-rich blood to boost recovery. Increase circulation and prime your body for action before training or use post-workout to reduce inflammation and kick start your recovery.

# Compression Therapy Bottom Line

Beneficial for post-exercise recovery

- Enhanced blood flow
- Reduced muscle soreness
- Accelerated muscle function recovery
- Decreased muscle damage
- Improved subsequent performance



# Compression Therapy

Compression tights enhanced markers of venous return and muscle blood flow during recovery

Compression garments significantly reduce perceived muscle soreness following exercise

Compression garments accelerate the recovery of muscle strength and power

- Particularly for recovery from resistance exercise

# Compression Therapy

Compression garments reduce markers of muscle damage such as CK levels

Improved subsequent performance

- Demonstrated in cycling



# Infrared Sauna

A photograph of a man with short hair, wearing a dark t-shirt, sitting in a sauna. The sauna has vertical wooden panels. The lighting is warm and reddish, typical of infrared light.

STARTS AT  
**Infrared Sauna - 1 Person \$55**

Dry heat therapy utilizing the power of far infrared. Far infrared light waves are well beyond the visible spectrum and provide deeper heat penetration into your muscle tissues and joints. Infrared saunas run from 140°-175°F.

# Infrared Sauna Benefits



Reduced blood pressure

Improved endothelial function in patients with coronary risk factors

Short-term relief from pain and stiffness in those with RA and ankylosing spondylitis

Improvements in measures of quality of life for patients with T2DM

May help reduce inflammation and oxidative stress

# Cryo-Thermal Contouring



STARTS AT  
**Cryo-Thermal Contouring** **\$395**

Safely and effectively uses cryotherapy and heat to target and destroy fat cells without any damage to beneficial cells. Targeted cold exposure breaks down fat cells, releasing the contained lipids.

# Cryo-Thermal Contouring Benefits

Significant reductions in subcutaneous fat, especially abdomen

- Average loss of 4.6 cm in waist measurements 3 months after treatment

High levels of patient satisfaction reported

Subjective improvements in body contour and shape

Generally well-tolerated with mild and transient side effects

- Erythema, swelling, pain



# Red Light Therapy (Photobiomodulation)

A woman with curly hair is shown in profile, facing right, receiving red light therapy. She is positioned between two panels of red LED lights. The background is dark.

STARTS AT  
**Red Light Therapy      \$40**

Red Light Therapy enhances muscle recovery, reduces soreness, inflammation and pain, and boosts performance by promoting cellular regeneration, helping you to prepare for your next challenge.

# Red Light Therapy Benefits

## Muscle Soreness

- Reduces muscle soreness and enhances recovery post-exercise
- Reduces inflammation, oxidative stress, and muscle damage markers
- Promotes muscle repair and accelerates muscle healing



# Red Light Therapy Benefits

## Cognitive Function

- Improvements in memory, executive function, and mood
  - In healthy individuals
  - In TBI and post-concussion syndrome
- Benefits in post-COVID-19 cognitive impairments



# Theralight



STARTS AT  
**Theralight \$45**

TheraLight 360 full body photobiomodulation system is registered with the FDA as a Class I General Wellness and Class II Medical Device. Restore joint mobility, reduce muscle strain and stiffness, and increase blood circulation.

# Theralight Benefits

## Low-level light therapy (photobiomodulation)

### Reduced pain and inflammation

- Reduction of pro-inflammatory cytokines



### Muscle recovery and performance

- Skeletal muscle contractile function improved
- Reduced exercise-induced muscle fatigue
- Facilitates post-exercise recovery

# Theralight Benefits

## Improved wound healing

- Benefits in treatment of ulcers, surgical wounds, and burns

## Management of Dermatologic Conditions

- Benefits for acne, psoriasis, and vitiligo
- Benefits for inflammatory skin conditions

## Cancer care

- Reduction in pain and inflammation
- Improve side effects such as oral mucositis, radiodermatitis, and lymphedema
- Improved quality of life



# Cold Plunge



STARTS AT

**Cold Plunge** **\$40**

Immerse in cold water to speed up muscle recovery, ease soreness, and enhance performance. This treatment reduces inflammation, boosts circulation, and fights fatigue.

# Cold Plunge Benefits

## Muscle Soreness and Fatigue

- Reduced delayed onset muscle soreness and perceived fatigue following intense exercise

## Improved recovery of physical performance

- Especially endurance and strength activities
- Reduced markers such as CK and LDH

## Cardiovascular and Autonomic Benefits

- Increases heart rate variability indices
- Improved parasympathetic nervous activity
- Reduced HR and BP



# Cold Plunge Benefits

## Mental Health and Wellbeing

- Reduced stress and cortisol levels
- Improved mood and perceived wellness
- Reductions in negative affect
- Improvements in sleep quality

## Immune system

- Reduction in sickness absence
- Improvements in overall immune response



# Hyperbaric Oxygen Therapy



STARTS AT  
**Hyperbaric Oxygen Therapy \$125**

Increases oxygen levels in your bloodstream leading to faster tissue repair, reduced muscle soreness, enhanced healing, improved cognitive function and better sleep.

# Hyperbaric Oxygen Therapy Benefits

## Muscle soreness

- Reduces inflammatory markers following acute exercise
  - IL-6 and TNF-alpha
- Reduces muscle damage markers after exercise
  - CK and LDH
- Promotes muscle regeneration and functional recovery
- Mixed evidence on delayed onset muscle soreness (DOMS)



# Hyperbaric Oxygen Therapy Benefits

## Healing

- Enhanced tissue oxygenation---chronic wounds
- Anti-inflammatory effect helps with diabetic ulcers and muscle injuries
- Stimulates osteoblast proliferation and bone healing



# Hyperbaric Oxygen Therapy Benefits

## Cognitive Function

- Improved cognitive function in children with persistent post-concussion syndrome
- Enhanced global cognitive function, attention, and executive function in post-COVID-19 condition
- Enhancements in memory, attention, and overall cognitive function in chronic TBI
- Improved attention, information processing speed, and executive function in healthy older adults
- Improved cognitive function in patients with Parkinson disease

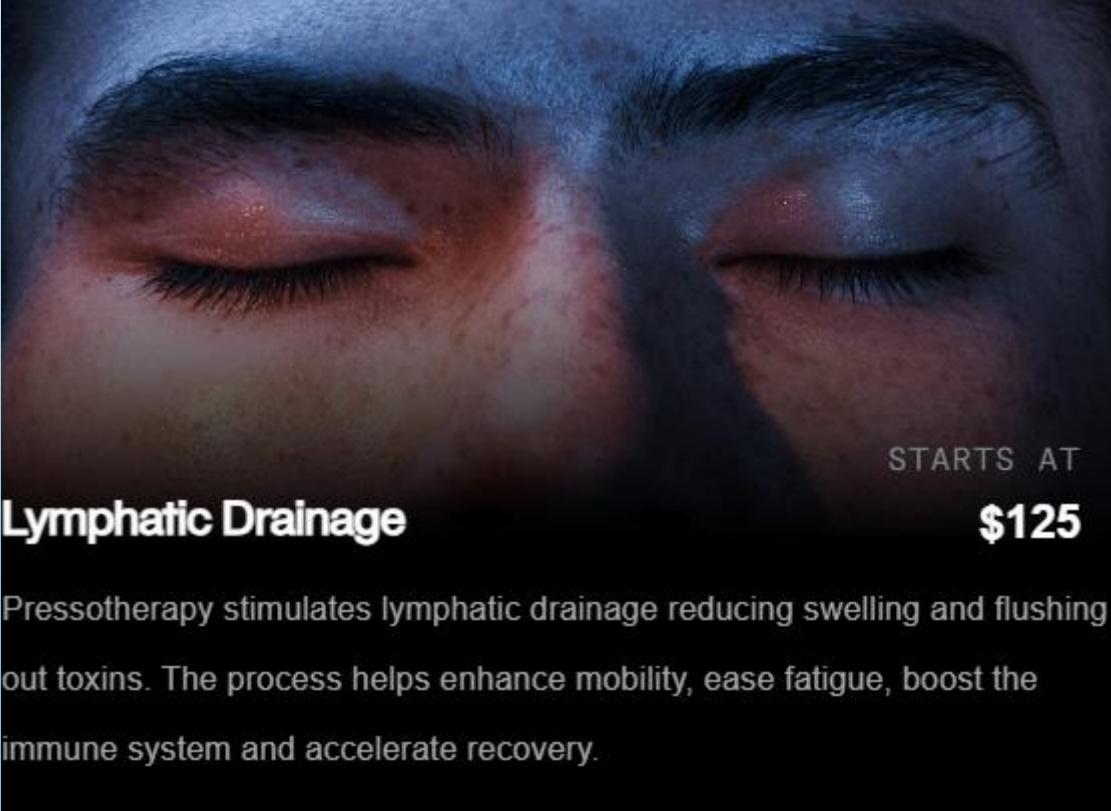
# Hyperbaric Oxygen Therapy Benefits

Improves sleep quality in patients with:

- Post-COVID-19 condition
- Parkinson disease
- Military personnel with post-concussive mild TBI
- Chronic insomnia at high altitudes



# Lymphatic Drainage Therapy



STARTS AT  
**Lymphatic Drainage** **\$125**

Pressotherapy stimulates lymphatic drainage reducing swelling and flushing out toxins. The process helps enhance mobility, ease fatigue, boost the immune system and accelerate recovery.

# Lymphatic Drainage Therapy



- Evidence is mixed
- Some studies show benefits in pain reduction and incidence of lymphedema
- Others show no significant improvements in volume reduction or quality of life
- No medical literature to support claims of flushing toxins, easing fatigue, boosting immune system, or accelerating recovery

# Pulsed Electromagnetic Therapy

A black and white photograph showing a close-up of a muscular torso, likely a man's, with well-defined pectoral and abdominal muscles. The lighting is dramatic, highlighting the contours and texture of the skin and muscle tissue.

STARTS AT  
**Pulsed Electromagnetic Therapy      \$40**

PEMF uses electromagnetic fields to enhance cellular repair, reduce inflammation, and relieve muscle soreness. Ideal for improving performance and supporting injury recovery.

# Pulsed Electromagnetic Therapy Benefits

## Osteoarthritis

- Reduced pain and stiffness and improved function in osteoarthritis
- Improved muscle strength and pain relief when combined with home-based exercise



# Pulsed Electromagnetic Therapy Benefits

Enhances recovery from injuries

- Stimulates stem cell proliferation and differentiation
- Regulates inflammatory response
- Accelerates wound healing

Reduces inflammation and oxidative stress

- Decreases expression of pro-inflammatory cytokines

Neuroprotective effects in vitro

- Inhibition of pro-inflammatory cytokine release



# Whole Body Cryo



STARTS AT  
**Whole Body Cryo \$75**

Expose the body to ultra-cool air for 3 minutes, as the core works intensively to heat blood and transport it to the extremities. Circulation is increased, purifying blood by replacing harmful toxins with oxygen and accelerating healing and recovery.

# Whole Body Cryo Benefits

Effective in reducing muscle soreness and systemic inflammation following intense physical activity.

- Improves recovery of athletic capacity and performance
- Reduces levels of pro-inflammatory cytokines
- Reduces markers of muscle cell damage



# Whole Body Cryo Benefits

Chronic exposure can improve glucose homeostasis and reduce fasting glucose levels

May improve sleep quality and have positive effects on symptoms of depression and anxiety

Reduces pain and disease activity in patients with RA

# Questions



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