

# CURRENT CONCEPTS OF MUSCLE AND TENDON ADAPTATION TO STRENGTH AND CONDITIONING

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## ABSTRACT

Injuries to the muscle and/or associated tendon(s) are common clinical entities treated by sports physical therapists and other rehabilitation professionals. Therapeutic exercise is a primary treatment modality for muscle and/or tendon injuries; however, the therapeutic exercise strategies should not be applied in a “one-size-fits-all approach”. To optimize an athlete’s rehabilitation or performance, one must be able to construct resistance training programs accounting for the type of injury, the stage of healing, the functional and architectural requirements for the muscle and tendon, and the long-term goals for that patient. The purpose of this clinical commentary is to review the muscular and tendinous adaptations associated with strength training, link training adaptations and resistance training principles for the athlete recovering from an injury, and illustrate the application of evidence-based resistance training for patients with a tendinopathy.

**Key Words:** Muscle, resistance training, therapeutic exercise, tendon

**Level of Evidence:** 5

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