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Effects of Resistance Exercise Variables on Muscle Adaptation and Physical Performance

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Message from the Guest Editor

Skeletal muscle is a prerequisite for directed movement of humans and physical performance in sports. Due to its ability to adapt to a wide range of mechanical and metabolic stimuli, exercise provides the fundamental basis for performance enhancement. Resistance exercise is a highly potent method to increase skeletal muscle mass and force generation in humans, a key factor for performance in many disciplines. Research in recent decades has generated a profound knowledge of molecular mechanisms that explain skeletal muscle adaptation towards resistance exercise. Major mechanisms that maintain skeletal muscle proteostasis in mechanically loaded human skeletal muscle, involve molecular networks that control synthesis and degradation of functional proteins within myofibers.



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Message from the Editor-in-Chief

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