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THE MECHANISMS OF MUSCLE HYPERTROPHY AND THEIR APPLICATION TO RESISTANCE TRAINING

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THE MECHANISMS OF MUSCLE HYPERTROPHY AND THEIR APPLICATION TO RESISTANCE TRAINING

By

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PROJECT

Presented to the Graduate Faculty of Psychology

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Abstract

The quest to increase lean body mass is widely pursued by those who lift weights. Research is lacking, however, as to the best approach for maximizing exercise-induced muscle growth. Bodybuilders generally train with moderate loads and fairly short rest intervals that induce high amounts of metabolic stress. Powerlifters, on the other hand, routinely train with high intensity loads and lengthy rest periods between sets. While both groups are known to display impressive muscularity, it is not clear which method is superior for hypertrophic gains, or whether other training methods may perhaps show superiority. Therefore, the purpose of this proposed paper is twofold: a) to extensively review the literature as to the mechanisms of muscle hypertrophy and their application to resistance training variables; and b) to draw conclusions from the research and develop a hypertrophy-specific routine for maximizing muscle growth.