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A Comparison of Linear and Daily Undulating Periodized Strength Training Programes for Quadriceps Strength in Normal Young Male Population

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Abstract

Aim: To determine more efficient method of periodized strength training program, and to determine if either method of periodization elicits superior gains in 1RM and 10 RM for quadriceps muscle in males. **Material and Method:** A sample of thirty normal males aged between 18-30 years was taken for the study by convenient (purposive) sampling and were randomly divided into two groups consisting of thirty each i.e. Group-A (Trained with Linear periodization (LP) and Group-B (Trained with Daily undulating periodization (DUP).An experimental design involving the comparative analysis with pre and post-test scores of the two groups, namely Group-A & B, was used in this study. The total duration of the study was 6 Weeks. **Results:** Comparison of means of pre-test score of 1 RM shows that there is no significant difference between two groups i.e. same at baseline. Comparison of means of 1 RM at 3 weeks and at 6 weeks shows no significant differences. Hence it showed that there are no significant improvements between groups analysis of 1 RM. Within group analysis with 1 RM scores shows the significant change in strength when comparison of pre-test to 3weeks and pre-test to 6 weeks was done. It indicates that the linear periodisation and daily undulating periodisation is effective in improving the strength of quadricep muscle. Comparison of means of pre-test score of 10 RM shows that there is no significant difference between two groups i.e. same at baseline. Comparison of means of 1 RM at 3 weeks and at 6 weeks shows no significant differences. Hence it showed that there is no significant improvement between groups analysis of 10 RM.Within group analysis with 10 RM scores shows the significant change in strength when comparison of pre-test to 3weeks and pre-test to 6 weeks was done. It indicates that the linear periodisation and daily undulating periodisation is effective in improving the strength of quadriceps muscle. **Conclusion:** The study concludes that both linear periodization and Daily undulating periodization are equally effective means of improving the strength and endurance of Quadriceps in males of age group 18-30 yrs.

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Introduction

The popularity of resistance training has grown immensely over the past 25 years, with extensive research demonstrating that not only is resistance training an effective method to improve neuromuscular function, it can also be equally effective in maintaining or improving individual