



**CODE: ABS 011**

## **EFFECTS OF CALISTHENICS TRAINING ON FLEXIBILITY, MUSCLE STRENGTH, MUSCLE ENDURANCE IN SEDENTARY COLLEGE STUDENTS.**

R. Agalyadharshini <sup>1</sup>

<sup>1</sup> Student, KG College of Physiotherapy, Coimbatore, Tamil Nadu, India.

**Background:** Calisthenics exercises utilize body weight for resistance and are widely recognized for their ability to enhance strength, endurance, flexibility, and coordination. With increasing sedentary lifestyles among college students, there is a pressing need to explore effective training methods that can promote physical fitness.

**Objective:** This study aimed to evaluate the effects of a structured calisthenics training program on flexibility, muscle strength, and muscle endurance in sedentary college students.

**Methods:** Twenty students aged 18-25 years, identified as having a sedentary lifestyle, were recruited for the study. Participants underwent a six-month calisthenics training program that included exercises targeting various muscle groups and flexibility enhancement. The effectiveness of the program was assessed using specific outcome measures: the sit-and-reach test for flexibility, push-ups to gauge muscle strength, and sit-ups to measure muscle endurance. These parameters were recorded before the intervention and after 12 weeks of training.

**Results:** The results indicated significant improvements in all measured outcomes. Flexibility increased markedly, with a t-value of 40.20. Muscle strength improved significantly, reflected by a t-value of 51.43, while muscle endurance showed substantial enhancement with a t-value of 56.22.

**Conclusion:** The study concludes that calisthenics training is effective in significantly improving flexibility, muscle strength, and muscle endurance in sedentary college students, highlighting its role in fostering better health outcomes.

**Implications:** These findings underscore the potential of calisthenics training as an accessible and effective method for improving physical fitness among sedentary college students. This research contributes to the growing awareness of the importance of incorporating regular physical activity into daily routines to promote overall health.

**Keywords:** Calisthenics, physical fitness, muscle endurance, muscle strength, flexibility.