

Effects of Warm-up Exercises on Spirometric Measurements in Athletes and Sedentary Individuals

Aynur Otag¹ and İlhan Otag²

*¹Department of Physiotherapy and Rehabilitation, Health Sciences Faculty,
Cumhuriyet University, Sivas, Turkey*

²Vocational School of Health, Cumhuriyet University, Sivas, Turkey

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ABSTRACT Regular physical activity is important for health. The present study aimed to examine the effects of warm-up exercises involving stretching on Spiro metric measurements in 30 athletes and 30 sedentary individuals. This study was designed as a randomized, crossover study. Initially, Spiro metric measurements were conducted before and after treadmill exercise in accordance with the Bruce protocol. After 15 days, Spirometric measurements were conducted before and after a warm-up program and the same exercise test. With warm-up exercises, the forced expiratory volume in 1 second increased in the athlete group. Additionally, the peak expiratory flow, forced inspiratory flow (25-75%), and $V_{max_{25}}$ increased with warm-up exercises. However, warm-up exercises did not influence Spiro metric measurements in the sedentary group. Among athletes, ventilation volume values increased generally with warm-up exercises. For this reason, we can say that warm-up exercises increase muscle strength, resulting in optimization of aerobic function.