

## Abstract

- Title:** Effect of local and complex active recovery on repeated isometric fingers flexors performance
- Objectives:** Comparison of the effect of three different types of active recovery on isometric performance of fingers flexors.
- Methods:** The study was participated by 6 men (age  $32,5 \pm 8,9$ ) and 2 women (age 30 and 42), who underwent three randomly chosen types of active recovery (with isolated engaging of upper extremities - HK, with isolated engaging of lower extremities - DK, with engaging of upper extremities lower extremities - HDK) during three visits with at least 48 hour gap. Their performance was measured with the help of alternate exercise (8 sec exercise/2 sec break). Exercise was repeated three times and during the break between exercises was applied one regeneration method.
- Results:** The study shows that active recovery type DK is the most advantageous in comparison with active recovery type HK and HDK when talking about repeated performance of fingers until exhaustion. Time of the second performance decreased by  $\downarrow 4,5 \%$  and the third performance decreased by  $\downarrow 15,7 \%$  in comparison with the first performance with the apply of regeneration type DK. Time of the second performance decreased by  $\downarrow 10,3 \%$  and the third performance decreased by  $\downarrow 26,2 \%$  in comparison with the first performance with the apply of regeneration type HK. Time of the second performance decreased by  $\downarrow 18 \%$  and the third performance decreased by  $\downarrow 24,7 \%$  in comparison with the first performance with the apply of recovery type HDK.
- Conclusion:** Recovery with engaging of larger unexercised muscle groups between alternate exercises with isometric characteristics is more efficient in comparison with recovery with engaging of exercising upper extremities. It helps to local and complex recovery.
- Keywords:** fatigue, recovery, alternate exercise, effect of recovery