and the training programs performed, our results seem to indicate that the strength training may be useful in TC reduction and the aerobic training in TGL reduction.

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# Relay start in swimming: a review

Andreia Fonseca[1], Hugo Louro[1,2], Aldo M. Costa[2,3,4], Ana Conceição[1,2,5]

1. Sport Sciences School of Rio Maior, Rio Maior, Portugal; andreiaduartefonseca@gmail.com; 2. Research Center in Sports Sciences, Health and Human Development, CIDESD, Vila Real, Portugal; 3. Universidade da Beira Interior, Departamento de Ciências do Desporto, Covilhã, Portugal; 4. CICS-UBI, Health Sciences Investigation Center, University of Beira Interior, Covilhã, Portugal; 5. CIEQV- Life Quality Research Center, Santarém, Portugal;

The literature is still scarce in studies on relay start in swimming (NPD). The reasons for this lack of research are considered to be based on the low number and public awareness of relay races in swimming events. FINA rules permit the second, the third, and the fourth swimmers to start their dives from the starting block before the incoming swimmer have finished their segments of the race. So, parts of the outgoing swimmer's foot must remain on the platform until the incoming swimmer has touched the wall. The aim of this study was to conduct a literature review regarding: i) the contribution of relay starts to overall swimming performance; ii) the effects of different starting techniques for evidence of relay. Using keywords ("swimming", "relay start", "relay"; "exchange time"), a comprehensive search was conducted on PubMed and Google Scholar databases. Only papers written in English and containing data about swimming relays with amateurs and/or elite swimmers (of all ages) were included. From the 6 studies found, some high variety methodologies in swimming relays were reported. With respect to swimming performance, the determination of the change over-time of the block output is the most studied topic of research, following by the final performance of the swimmers. The efficacy of different types of relay starts has also been studied but without consistent results, which seems to suggest that personal style is a key factor. Only one empirical study was found regarding the training intervention, suggesting a combination of verbal feedback and video analyses (with time) as relevant strategies to improve the relay exchange time, technique and team coordination. Recently Skorski, Etxebarria, and Thompson (2016) investigated if swimming performance is better in a relay race than in individual race, noting that highly trained swimmers do not swim faster in the relay events than the individual. The literature is consistent about the importance of the relay exchanges times during swimming events, but inconclusive about the optimal relay start technique and *practice intervention strategies*.

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# Effects of classic strength training versus eccentric-enhanced resistance training in people with Multiple Sclerosis

Claudia Eliza Patrocinio de Oliveira[1,2], Osvaldo Costa Moreira[1,2], José Antonio de Paz Fernández[1]

1. Institute of Biomedicine, University of León, Spain; 2. Department of Physical Education, Federal University of Viçosa, Brazil; claudiapatrocinio@ymail.com

Despite looking like training with emphasis on eccentric actions it is safer and more efficient than the classical strength training to promote increases in strength, muscle mass and function (Roig et al., 2008; Fernández-Gonzalo et al., 2014), is not clear yet whether this training demonstrates the same benefits in people with Multiple Sclerosis (MS). To verify the effects of strength eccentric-enhanced resistance training (EERT) versus classic strength training (CST) in performance of functional testing and different manifestations of the strength of lower limbs in people with MS. Were evaluated 53 patients (20 men and 33 women) divided into two groups: the control group (GC) developed by the CST and the experimental group (GE) made EERT, both exercises are for lower limbs, with emphasis on the quadriceps. They were assessed before and after 13 weeks of training, through tests: get up and down (GUD), Timed Up and Go (TUG), maximal isometric strength (MIS) and maximal dynamic strength (1RM). Intragroup comparisons were made by Student t test for related samples. Intergroup comparisons were performed using the percentage delta by Student t test for independent samples. The effect size Cohen's d was calculated. The significance level was $p<0.05$. No