World ranked swimmers: analysis of the finalists´ ages between 2000 and 2016 Olympic games

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Swimming is a sport determined being the age beginning to compete at high-level a concern for a proper planning of the swimmer´s career plan. There is an understanding that the career in swimming, sometimes considered does happen very early as far as biological age is concerned (Platonov, & Fessenko, 1994). It was noted that swimmers reach the career peak earlier than other athletes (Silva et al., 2007). The aim of this study was to: (i) describe the decimal initial ages in the last five Olympic finals (2000 to 2016); and ii) compare the means of the decimal ages between genders, event distances and swimming strokes. It was analyzed 2080 entries corresponding to the classification of the 16 swimmers finalists and semifinalists in the following events: 50; 100; 200; 400; 800m or 1500m freestyle for both genders, respectively; 100 and 200m backstroke; 100 and 200m breaststroke; 100 and 200m butterfly and 400m medley for both genders. The inclusion criteria was: i) competing at the Olympic Games Sydney 2000, Athens 2004, Beijing 2008, London 2012 and Rio 2016; ii) having qualified to the finals in at least one swimming events; iii) swimmers name and chronological age were available; iv) final classification in the event was also available. Afterwards, chronological age was converted into decimal age at the day of the event heats. The results showed that average age was between 20 to 25 years old in Olympic finals, being the in the sprinting events that it was found the oldest swimmers. We also found that in sprinting events the decimal ages are higher than in the middle- or long-distance events. The breaststroke and the medley events presented initial decimal ages lower for the female gender, with 15 and 16 years for the entrance to the finals. It can be concluded that there was a trend to an increase the average age of male and female swimmers in the finals of the Olympic Games, which suggests an increase in the duration of the sport career in swimming.

References:

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Effects of endurance versus strength training programs in the lipid profile of sedentary young adults

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Cardiovascular diseases are a major cause of mortality in the world, and abnormal blood lipids are an important risk factors for these disease (Stampfer et al., 2000). Thus, controlling this risk factor, particularly cholesterol and triglycerides levels is essential (Curb et al., 2004). It is consensual that physical activity contributes to healthy lipidic levels (Haskell, 1984), however, it is not clear which type of exercise training is the best to this end. The present study aimed to analyze the effect of aerobic vs. strength training in total cholesterol (TC) and triglycerides (TGL) levels of young adults. The sample was randomly clustered into three groups: the aerobic training group (N=32), the strength training group (N=28) and the control group (N=21). All participants were sedentary college students (young adults) and were similar age and height. The aerobic and strength training programs comprised a period of 14 weeks, with three sessions/week for 1 hour. Three evaluations were performed (initial, 7weeks and 14weeks), in which body composition was measured and unstimulated whole saliva was collected using the drooling technique. Salivary cholesterol and triglyceride were assessed by colorimetric methods. Comparison evidenced that the strength group showed a decrease in TC over the 14 weeks. On the contrary, the control group showed an increase in TC (p=0.017). These contributed to the observed differences in TC between strength and control groups after the 14 weeks (p=0.035). Regarding the TGL, there was a reduction in TGL of the aerobic group over the 14 weeks (p=0,003). The TGL levels of the strength and the control groups did not changed significantly. Between groups, no significant differences in TGL were observed. Taking into account the young adults population