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Editorial

Muscle stretching: a practice sustained by habit?

Alongamento muscular: uma prática sustentada pelo hábito?

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Stretching techniques are applied consistently in settings such as gyms, sports competitions and rehabilitation centers. These techniques are defined as muscle stretching exercises, which provide increased range of motion. The use of stretching as a resource for gaining or maintaining range of motion is already well established, however, there are controversies about its use prior to exercise [1].

Among the unsustainable thoughts after scientific methodological screening are: the attenuation of late-onset muscle pain [2], improved performance in the neuromuscular exercise against load [3] and the prevention of injuries [1]. Our research group planned a protocol with the execution of maximum repetitions for the same load without heating, with stretching and flexing, with a reduction in the maximum number of repetitions for the last two modalities [3]. In other words, we demonstrate that the application of such techniques can even limit performance, especially if we consider high-performance athletes.

As for the use of stretching in the prevention or mitigation of injuries, the 2nd edition of the *Revista Brasileira de Fisiologia do Exercício* brings the work of Santos *et al.* [4] whose design will allow us to add another brick to our knowledge gap on the science of stretching. The study aims to verify the influence of stretching on muscle injury markers after a plyometric exercise session, which features the shortening/stretching cycles that occur quickly and increase the rate of muscle activation [4].

The analysis of the results involved the measurement of Creatine Kinase (CK) values before, after 24 h and 48 h, as well as the perception through a visual analogue scale with a score from 0 to 10. There was no demonstration of cli-

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nical or statistically relevant difference for the comparison of the different moments in relation to the previous performance of static stretching.

These findings make us to question the indiscriminate application and defense of stretching in several environments, for different moments and purposes. Therefore, it is necessary to ask: How much of what we have been doing is actually proven by science or, in the absence of studies, provided by an intelligible rationale?

References

1. Di Alencar TAM, Matias KFS. Princípios fisiológicos do aquecimento e alongamento muscular na atividade esportiva. Rev Bras Med Esporte 2010;16(3):230-34. doi: 10.1590/S1517-86922010000300015

2. Hotfiel T, Freiwald J, Hoppe M, Lutter C, Forst R, Grim C et al. Advances in Delayed-Onset Muscle Soreness (DOMS): Part I: Pathogenesis and diagnostics. Sportverletz Sportschaden. 2018;32(04):243-50. doi: 10.1055/a-0753-1884

3. Petto J, Cruz TA, Patrício DS, Sacramento MS, Almeida ARL, Almeida LAB, Santos ACN, Diogo DP. The acute influence of stretching in muscle resistance strength: transversal intervention study. Manual Therapy, Posturology and Rehabilitation Journal 2019;17:711. doi: 10.17784/mtprehabjournal.2019.17.711

4. Santos GA, Moreira SR, Santos DFC, Santos FR, Teixeira-Coelho F. Efeito do alongamento estático pré-exercício pliométrico sobre marcadores indiretos de danos musculares. Rev Bras Fisiol Exerc 2021;20(2). doi: 10.33233/rbfex.v20i2.4146