

RESEARCH SPORTS MEDICINE

Chinese Medicine

Recent research indicates varying but positive effects of acupuncture on muscle soreness. As well, acupuncture features very little to no adverse events, allowing for a safe, effective option for pain and soreness in athletes and those participating in exercise programs.

Research further indicates potential benefit both to joint and cardiorespiratory endurance, including improved outcomes for those with COPD pursuing exercise.



Muscle Soreness

- Cardoso, R., Lumini-Oliveira, J. A., Santos, M. J., Ramos, B., Matos, L. C., Machado, J., Greten, H. J., & Franconi, G. (2020). Acupuncture can be beneficial for exercise-induced muscle soreness: A randomised controlled trial. *Journal of bodywork and movement therapies*, 24(1), 8–14. PMID: 31987567
- Antonassi, D. P., Rodacki, C. L. N., Lodovico, A., Ugrinowitsch, C., & Rodacki, A. L. F. (2021). Immediate Effects of Acupuncture on Force and Delayed Onset of Muscle Soreness. *Medical acupuncture*, 33(3), 203–211. PMID: 34239662
- Yu, M., Wang, X., & Zhou, X. (2022). Analysis of the Effect of Acupuncture and Pressing of Traditional Chinese Medicine on Recovery of Delayed Muscle Soreness in Athletes. *Journal of healthcare engineering*, 2022, 7875068. <https://doi.org/10.1155/2022/7875068> PMID: 35178234
- Huang, C., Wang, Z., Xu, X., Hu, S., Zhu, R., & Chen, X. (2020). Does Acupuncture Benefit Delayed-Onset Muscle Soreness After Strenuous Exercise? A Systematic Review and Meta-Analysis. *Frontiers in physiology*, 11, 666. PMID: 32765287
- Huang, C., Wang, Z., Xu, X., Hu, S., Zhu, R., & Chen, X. (2020). Does Acupuncture Benefit Delayed-Onset Muscle Soreness After Strenuous Exercise? A Systematic Review and Meta-Analysis. *Frontiers in physiology*, 11, 666. PMID: 32765287

Muscle Endurance

- Tsopanidou, A. A., Chatzakis, P. E., Drimalas, P. V., Stavridis, I. S., Dallas, G. C., & Zacharogiannis, E. G. (2020). Effect of acupuncture in physiological parameters and endurance running performance. *The Journal of sports medicine and physical fitness*, 60(6), 841–847. <https://doi.org/10.23736/S0022-4707.20.10325-6> PMID: 32253895
- Su, Y., Yao, S., Zhou, Z. J., Wu, C., Wang, I. L., & Lai, C. Y. (2022). Effect of Acupuncture on Time-Dependent of Muscle Endurance in Female Elbow Joint: A Randomized Controlled Trial. *Evidence-based complementary and alternative medicine : eCAM*, 2022, 8052256. <https://doi.org/10.1155/2022/8052256> PMID: 35186105
- Wang, I. L., Hu, R., Chen, Y. M., Chen, C. H., Wang, J., & Ho, C. S. (2021). Effect of Acupuncture on Timeliness of Male Shoulder Joint Endurance. *International journal of environmental research and public health*, 18(11), 5638. <https://doi.org/10.3390/ijerph18115638> PMID: 34070380
- Maekura, T., Miki, K., Miki, M., Kitada, S., & Maekura, R. (2019). Clinical Effects Of Acupuncture On The Pathophysiological Mechanism Of Chronic Obstructive Pulmonary Disease During Exercise. *International journal of chronic obstructive pulmonary disease*, 14, 2787–2798. <https://doi.org/10.2147/COPD.S225694> PMID: 31827322