

Hyperbaric oxygen therapy improves physical performance in older adults

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Intermittent hyperbaric oxygen therapy (HBOT) may improve physical performance in sedentary older adults, according to a study [published](#) online July 3 in *BMC Geriatrics*.

Amir Hadanny, M.D., Ph.D., from Tel-Aviv University in Israel, and colleagues evaluated the effect of an intermittent HBOT protocol on maximal [physical performance](#) and cardiac perfusion in sedentary older adults. Analysis included 63 adults (> 64 years) randomly assigned to either HBOT (60 sessions daily for 12 consecutive weeks) or control arms for three months.

The researchers found that following HBOT, improvements were seen in [maximal oxygen consumption](#), with a significant increase of 1.91 mL/kg/min, yielding a net effect size of 0.455. Additionally, oxygen consumption measured at the first ventilatory threshold significantly increased with HBOT by 160.03 mL/min with a net effect size of 0.617. There were also significant increases in both cardiac blood flow (MBF) and cardiac blood volume (MBV) versus the [control group](#). The net effect size for MBF was large at 0.797 and even larger for the net effect size for MBV (0.896).

"An important mechanism contributing to these improvements is the heightened cardiac perfusion induced by HBOT," the authors write.

Several authors reported ties to AVIV Scientific LTD.

More information: Amir Hadanny et al, Physical enhancement of older adults using hyperbaric oxygen: a randomized controlled trial, *BMC Geriatrics* (2024). [DOI: 10.1186/s12877-024-05146-3](https://doi.org/10.1186/s12877-024-05146-3)

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