

No evidence that doping enhances athletic performance

December 10 2012



Although use of recombinant human erythropoietin is prohibited among athletes because it reportedly enhances performance, there is no scientific evidence that it does so, according to a study published online Dec. 6 in the *British Journal of Clinical Pharmacology*.

(HealthDay)—Although use of recombinant human erythropoietin (rHuEPO) is prohibited among athletes because it reportedly enhances performance, there is no scientific evidence that it does so, according to a study published online Dec. 6 in the *British Journal of Clinical Pharmacology*.

Jules A.A.C. Heuberger, from Leiden University in the Netherlands, and colleagues reviewed 13 studies in the scientific and medical literature examining the effect of rHuEPO on [endurance performance](#).

The researchers found that no study specifically addressed [elite athletes](#). Most studies used forms of rHuEPO with half-lives similar to endogenous erythropoietin. Only eight studies were placebo controlled, and only five of these were reported to be double-blinded. Hemoglobin concentration, hematocrit, and [oxygen consumption](#) increased after rHuEPO treatment. However, the authors note that the only parameters associated with enhanced performance are lactate threshold, respiratory compensation point, and work economy. In addition, published case reports have linked rHuEPO to adverse cardiovascular effects among cyclists.

"rHuEPO use in cycling is rife but scientifically unsupported by evidence and its use in sports is medical malpractice," Heuberger and colleagues conclude. "The situation with rHuEPO use in athletes is analogous to the many forms of non-evidence-based treatments that exist in medical practice and which by common opinion should be refuted or confirmed by good clinical trials with real life end points."

More information: [Abstract](#)
[Full Text](#)

Copyright © 2012 [HealthDay](#). All rights reserved.

Citation: No evidence that doping enhances athletic performance (2012, December 10) retrieved 19 April 2024 from <https://medicalxpress.com/news/2012-12-evidence-doping-athletic.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--