

ΠΗ  
E 91/ja

Volume 113 • Number 4 • April 2013



# European Journal of Applied Physiology

 Springer

EDITORIAL

**New editors take over**

K.R. Westerterp · H. Westerblad 823

**"A Changing of the Guard" revisited**

S.A. Ward 825

ORIGINAL ARTICLES

**Determinants of muscle metaboreflex and involvement of baroreflex in boys and young men**

K. Diplá · S. Papadopoulos · A. Zafeiridis · A. Kyparos · M.G. Nikolaidis · I.S. Vrabas 827

**Moderate and heavy metabolic stress interval training improve arterial stiffness and heart rate dynamics in humans**

M. Rakobowchuk · E. Harris · A. Taylor · R.M. Cubbon · K.M. Birch 839

**Increase in IL-6, TNF- $\alpha$ , and MMP-9, but not sICAM-1, concentrations depends on exercise duration**

D. Reihmane · A. Jurka · P. Tretjakovs · F. Dela 851

**Changes in natural killer cell subpopulations over a winter training season in elite swimmers**

L. Rama · A.M. Teixeira · A. Matos · G. Borges · A. Henriques · M. Gleeson · S. Pedreiro · E. Filaire · F. Alves · A. Paiva 859

**Exercise-induced endocannabinoid signaling is modulated by intensity**

D.A. Raichlen · A.D. Foster · A. Seillier · A. Giuffrida · G.L. Gerdeman 869

**Just noticeable difference in perception of physical exertion during cycle exercise in young adult men and women**

L. Haile · R.J. Robertson · E.F. Nagle · M.P. Krause · M. Gallagher Jr. · C.M. Ledezma · K.S. Wisniewski · A.B. Shafer · F.L. Goss 877

**Uneven spatial distribution of surface EMG: what does it mean?**

A. Gallina · R. Merletti · M. Gazzoni 887

**Changes in surface EMG assessed by discrete wavelet transform during maximal isometric voluntary contractions following supramaximal cycling**

L. Peñailillo · R. Silvestre · K. Nosaka 895

**Congruency and responsiveness of perceived exertion and time-to-end-point during an intermittent isometric fatigue task**

J. Shepherd · N. Gleeson · C. Minshull 905

**Influence of muscle strength to weight ratio on functional task performance**

J.W. Ryder · R.E. Buxton · E. Goetchius · M. Scott-Pandorf · K.J. Hackney · J. Fiedler · R.J. Ploutz-Snyder · J.J. Bloomberg · L.L. Ploutz-Snyder 911

**Blood flow restriction does not result in prolonged decrements in torque**

J.P. Loenneke · R.S. Thiebaud · C.A. Fahs · L.M. Rossow · T. Abe · M.G. Bemben 923

**Effect of unilateral forearm inactivity on endothelium-dependent vasodilator function in humans**

G.K. Birk · E.A. Dawson · N. Timothy Cable · D.J. Green · D.H.J. Thijssen 933

**Fast-start strategy increases the time spent above 95 %  $VO_{2max}$  during severe-intensity intermittent running exercise**

R.A. de Aguiar · T. Turnes · R.S. de Oliveira Cruz · F. Caputo 941

**Exercise with low glycogen increases PGC-1 $\alpha$  gene expression in human skeletal muscle**

N. Psilander · P. Frank · M. Flockhart · K. Sahlin 951

**Six weeks of aerobic training improves  $VO_{2max}$  and MLSS but does not improve the time to fatigue at the MLSS**

T.T. Mendes · T.R. Fonseca · G.P. Ramos · C.F. Wilke · C.E.T. Cabido · C.L.M. De Barros · A.M. Lima · Lucas de Á.C.F. Mortimer · M.V. de Carvalho · M.M. Teixeira · N.R.V. Lima · E.S. Garcia 965

**Comparison of muscle hypertrophy following 6-month of continuous and periodic strength training**

R. Ogasawara · T. Yasuda · N. Ishii · T. Abe 975

Continuation on page A7

# European Journal of Applied Physiology

Volume 113 · Number 4 · April 2013

(Contents Continued)

**Long-term creatine supplementation improves muscular performance during resistance training in older women**

A.F. Aguiar · R.S.B. Januário · R.P. Junior · A.M. Gerage · F.L.C. Pina · M.A. do Nascimento · C.R. Padovani · E.S. Cyrino 987

**Intensive unilateral neuromuscular training on non-dominant side of low back improves balanced muscle response and spinal stability**

Y. Kim · J. Son · B. Yoon 997

**Low-intensity eccentric contractions attenuate muscle damage induced by subsequent maximal eccentric exercise of the knee extensors in the elderly**

T.C. Chen · W.-C. Tseng · G.-L. Huang · H.-L. Chen · K.-W. Tseng · K. Nosaka 1005

**Reductions in finger blood flow induced by 125-Hz vibration: effect of area of contact with vibration**

Y. Ye · M.J. Griffin 1017

**Hypohydration and acute thermal stress affect mood state but not cognition or dynamic postural balance**

B.R. Ely · K.J. Sollanek · S.N. Cheuvront · H.R. Lieberman · R.W. Kenefick 1027

**Regional differences in facial skin blood flow responses to the cold pressor and static handgrip tests**

H. Kashima · T. Ikemura · N. Hayashi 1035

**The mechanics of running while approaching and jumping over an obstacle**

G. Mauroy · B. Schepens · P.A. Willems 1043

**Effect of supplemental oxygen on post-exercise inflammatory response and oxidative stress**

J. White · B. Dawson · G. Landers · K. Croft · P. Peeling 1059

**Neuromuscular fatigue in young and older men using constant or variable resistance**

S. Walker · H. Peltonen · J. Avela · K. Häkkinen 1069

**Combined whole-body vibration, resistance exercise, and sustained vascular occlusion increases PGC-1 $\alpha$  and VEGF mRNA abundances**

F. Item · A. Nocito · S. Thöny · T. Bächler · U. Boutellier · R.H. Wenger · M. Toigo 1081

**Sex differences in central and peripheral mechanisms of fatigue in cyclists**

B.W. Glace · I.J. Kremenec · M.P. McHugh 1091

OBITUARY

**Professor Brian J. Whipp: an obituary**

Y. Fukuba · J.M. Kowalchuk · H.B. Rossiter 1099

ERRATUM

**Erratum to: Strength training elevates HSP27, HSP70 and  $\alpha$ B-crystallin levels in musculus vastus lateralis and trapezius**

G. Paulsen · K.E. Hanssen · B.R. Rønnestad · N.H. Kvamme · I. Ugelstad · F. Kadi · T. Raastad 1101

Further articles can be found at [www.springerlink.com](http://www.springerlink.com)

Instructions for Authors for *Eur J Appl Physiol* are available at [www.springer.com/00421](http://www.springer.com/00421)