

Atemmuskeltraining bei Gesunden

Respiratory Muscle Training in Healthy Subjects

A1 Übersichtsarbeiten – Reviews

A1.12	<p>Lorca-Santiago, J., Jiménez, S. L., Pareja-Galeano, H., Lorenzo, A.</p> <p><u>Inspiratory Muscle Training in Intermittent Sports Modalities: A Systematic Review</u></p> <p>Faculty of Sport Sciences, Universidad Europea De Madrid, 28670 Madrid, Spain.</p> <p><i>Int J Environ Res Public Health.</i> 2020 Jun 21</p>
A1.11	<p>Caidahl, Kenneth, Julià-Sánchez, S., Corbi, F., Odriozola-Martínez, A., Burtscher, M.</p> <p><u>Putative Role of Respiratory Muscle Training to Improve Endurance Performance in Hypoxia: A Review</u></p> <p>Department of Cell Biology, Physiology and Immunology, Faculty of Biology, University of Barcelona, Barcelona, Spain.</p> <p><i>Front Physiol.</i> 2019 Jan 15</p>
A1.10	<p>Shei, R. J.</p> <p><u>Recent Advancements in Our Understanding of the Ergogenic Effect of Respiratory Muscle Training in Healthy Humans: A Systematic Review</u></p> <p>Division of Pulmonary, Allergy, and Critical Care Medicine, and Gregory Fleming James Cystic Fibrosis Research Center, Department of Medicine, University of Alabama at Birmingham, Birmingham, Alabama.</p> <p><i>J Strength Cond Res.</i> 2018 Sep</p>
A1.09	<p>Sales, A. T., Fregonezi, G. A., Ramsook, A. H., Guenette, J. A., Lima, I. N., Reid, W. D.</p> <p><u>Respiratory muscle endurance after training in athletes and non-athletes: A systematic review and meta-analysis</u></p> <p>Department of Physical Therapy, University Federal of the Rio Grande do Norte, Natal, Rio Grande do Norte, Brazil.</p> <p><i>Phys Ther Sport.</i> 2016 Jan</p>
A1.08	<p>HajGhanbari B, Yamabayashi C, Sheel AW, Reid WD et al.</p> <p><u>Effects of respiratory muscle training on performance in athletes: a systematic review with meta-analyses</u></p> <p>Department of Physical Therapy, University of British Columbia, Vancouver, Canada</p> <p><i>J Strength Cond Res,</i> Jul 25, 2012</p>
A1.07	<p>Illi SK, Held U, Frank I, Spengler CM</p> <p><u>Effect of respiratory muscle training on exercise performance in healthy individuals a systematic review and meta-analysis</u></p> <p>Exercise Physiology, Institute of Human Movement Sciences, ETH Zurich, Switzerland</p> <p><i>Sports Med,</i> 42: 707-724, 2012</p>
A1.06	<p>Spengler CM</p> <p><u>Atmungsmuskeltraining und Leistungsfähigkeit</u></p> <p>Exercise Physiology, Institute of Human Movement Sciences, ETH Zurich, Switzerland</p> <p><i>Schweizerische Zeitschrift für Sportmedizin und Sporttraumatologie</i> 59:34-39, 2011</p>

Wissenschaftliche Publikationen – Scientific Publications

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A1.05	Verges S, Boutellier U, Spengler CM <u>Effect of respiratory muscle endurance training on respiratory sensations, respiratory control and exercise performance: a 15-year experience</u> Exercise Physiology, Institute of Human Movement Sciences, ETH Zurich, Switzerland <i>Respir Physiol Neurobiol</i> , 161: 16 – 22, 2008
A1.04	Enright, S. J., Unnithan, V. B., Heward, C., Withnall, L., Davies, D. H. <u>Effect of high-intensity inspiratory muscle training on lung volumes, diaphragm thickness, and exercise capacity in subjects who are healthy</u> School of Healthcare Studies, Cardiff University <i>Phys Ther.</i> 2006 Mar
A1.03	Spengler CM, Boutellier U <u>Breathless Legs? Consider Training your Respiration</u> Exercise Physiology, Institute of Human Movement Sciences, ETH Zurich, Switzerland <i>News Physiol Sci</i> , 15: 101-105, 2000
A1.02	Boutellier U <u>Respiratory muscle fitness and exercise endurance in healthy humans</u> Exercise Physiology, Institute of Human Movement Sciences, ETH Zurich, Switzerland <i>Med Sci Sports Exerc</i> , 30: 1169-1172, 1998
A1.01	Boutellier U <u>Auch die Atmung limitiert die körperliche Leistung bei gesunden Personen</u> Exercise Physiology, Institute of Human Movement Sciences, ETH Zurich, Switzerland <i>Naturforschende Gesellschaft in Zürich</i> 142/4 153-159, 1997
A1.00	Boutellier U <u>Die Atmung als leistungslimitierender Faktor bei Normalpersonen und Sportlern</u> Exercise Physiology, Institute of Human Movement Sciences, ETH Zurich, Switzerland <i>Deutsche Zeitschrift f Sportmedizin</i> , 47 (Sonderheft): 216-219, 1996

A2 Originalarbeiten – Original Publications

A2.10	Souza, Helga ; Rocha, Taciano ; Pessoa, Maira ; Rattes, Catarina ; Brandão, Daniella; Fregonezi, Guilherme; Campos, Shirley; Aliverti, Andrea; Dornelas, Armele <u>Effects of Inspiratory Muscle Training in Elderly Women on Respiratory Muscle Strength, Diaphragm Thickness and Mobility</u> <i>The Journals of Gerontology</i> , 2014
A2.09	Lemaitre F, Coquart JB, Chavallard F, Castres I, Mucci P, Costalat G, Chollet D <u>Effect of additional respiratory muscle endurance training in young well-trained swimmers</u> Activité Physique-Muscle-Santé, Faculté des Sciences du Sport, Ronchin, France <i>J Sports Sci Med</i> . 12(4): 630-638, 2013

A2.07	<p>Sartorio A, Agosti F, Patrizi A, Compri E, Muller EE, Cella SG, Rigamonti AE</p> <p><u>Growth hormone response induced by a respiratory muscle endurance training in healthy subjects</u></p> <p>Istituto Auxologico Italiano, IRCCS, Experimental Laboratory for Auxo-endocrinological Research, Milan and Verbania, Italy</p> <p><i>Horm Metab Res. 44: 319–324, 2012</i></p>
A2.06	<p>Vergès S, Renggli AS, Notter DA, Spengler CM</p> <p><u>Effects of different respiratory muscle training regimes on fatigue-related variables during volitional hypernoea</u></p> <p>Exercise Physiology, Institute of Human Movement Sciences, ETH Zurich, Switzerland</p> <p><i>Respir Physiol Neurobiol. 31;169:282-289, 2009</i></p>
A2.05	<p>Holm P, Sattler A, Fregosi RF</p> <p><u>Endurance training of respiratory muscles improves cycling performance in fit young cyclists</u></p> <p>Department of Physiology, The University of Arizona, Tucson, USA</p> <p><i>BMC Physiology, 4:9, 2004</i></p>
A2.04	<p>Markov G, Spengler CM, Knöpfli C, Stuessi C, Boutellier U</p> <p><u>Respiratory muscle training increases cycling endurance without affecting cardiovascular responses to exercise</u></p> <p>Exercise Physiology, Institute of Human Movement Sciences, ETH Zurich, Switzerland</p> <p><i>Eur J Appl Physiol, 85: 233-239, 2001</i></p>
A2.03	<p>Stuessi C, Spengler CM, Knöpfli C, Markov G, Boutellier U</p> <p><u>Respiratory muscle endurance training in humans increases cycling endurance without affecting blood gas concentrations</u></p> <p>Exercise Physiology, Institute of Human Movement Sciences, ETH Zurich, Switzerland</p> <p><i>Eur J Appl Physiol, 84: 582-586, 2001</i></p>
A2.02	<p>Spengler CM, Roos M, Laube SM, Boutellier U</p> <p><u>Decreased exercise blood lactate concentrations after respiratory endurance training in humans</u></p> <p>Exercise Physiology, Institute of Human Movement Sciences, ETH Zurich, Switzerland</p> <p><i>Eur J Appl. Physiol, 79: 299-305, 1999</i></p>
A2.01	<p>Boutellier U, Büchel R, Kundert A, Spengler CM</p> <p><u>The respiratory system as an exercise limiting factor in normal trained subjects</u></p> <p>Department of Physiology, University of Zurich, Switzerland</p> <p><i>Eur J Appl Physiol, 65: 347-353, 1992</i></p>
A2.00	<p>Boutellier U, Piwko P</p> <p><u>The respiratory system as an exercise limiting factor in normal sedentary subjects</u></p> <p>Department of Physiology, University of Zurich, Switzerland</p> <p><i>Eur J Appl Physiol, 64: 145-152, 1992</i></p>

B1 Hintergründe Atmungsmuskulatur – Basics on Respiratory Muscles

B1.09	<p>Wüthrich TU, Marty J, Kerherve H, Millet GY, Verges S, Spengler CM</p> <p><u>Aspects of respiratory muscle fatigue in a mountain ultramarathon race</u></p> <p>Exercise Physiology, Institute of Human Movement Sciences, ETH Zurich, Switzerland</p> <p><i>MSSE, 47(3), 519–27, 2015</i></p>
B1.08	<p>Wüthrich TU, Eberle EC, Spengler CM</p> <p><u>Locomotor and diaphragm muscle fatigue in endurance athletes performing time-trials of different durations</u></p> <p>Exercise Physiology, Institute of Human Movement Sciences, ETH Zurich, Switzerland</p> <p><i>Eur J Appl Physiol, 114(8), 1619–1633, 2014</i></p>
B1.07	<p>Vogiatzis I, Athanasopoulos D, Habazettl H, Kuebler WM, Wagner H et al.</p> <p><u>Intercostal muscle blood flow limitation in athletes during maximal exercise</u></p> <p>Departement of Critical Care Medicine and Pulmonary Services, University of Athens, Greece</p> <p><i>J Physiol, 587: 3665-77, 2009</i></p>
B1.06	<p>Verges S, Kruttli U, Stahl B, Frigg R, Spengler CM</p> <p><u>Expiratory muscle fatigue impairs exercise performance</u></p> <p>Exercise Physiology, Institute of Human Movement Sciences, ETH Zurich, Switzerland</p> <p><i>Eur J Appl Physiol, 101: 225-32, 2007</i></p>
B1.05	<p>Dempsey JA, Romer L, Rodman J, Miller J, Smith C</p> <p><u>Consequences of exercise-induced respiratory muscle work</u></p> <p>John Rankin Laboratory of Pulmonary Medicine, Department of Population Health Sciences, University of Wisconsin, Madison, USA</p> <p><i>Respir Physiol Neurobiol, 151:242-50, 2006</i></p>
B1.04	<p>Romer L, Lovering AT, Haverkamp HC, Pegelow DF, Dempsey JA</p> <p><u>Effect of inspiratory muscle work on peripheral fatigue of locomotor muscles in healthy humans</u></p> <p>John Rankin Laboratory of Pulmonary Medicine, Department of Population Health Sciences, University of Wisconsin, Madison, USA</p> <p><i>J Physiol, 571: 425-439, 2006</i></p>
B1.03	<p>Dempsey JA, Sheel AW, St. Croix CM, Morgan BJ</p> <p><u>Respiratory influences on sympathetic vasomotor outflow in humans</u></p> <p>John Rankin Laboratory of Pulmonary Medicine, Department of Population Health Sciences, University of Wisconsin, Madison, USA</p> <p><i>Respir Physiol Neurobiol, 130: 3-20, 2002</i></p>

B1.02	<p>Seals DR</p> <p><u>Robin Hood for the lungs? A respiratory metaboreflex that ‘steals’ blood from locomotor muscles</u></p> <p>Department of Kinesiology and Applied Physiology, University of Colorado, Boulder, USA</p> <p><i>J Physiol</i>, 537:1, 2001</p>
B1.01	<p>Perret C, Spengler CM, Egger G, Boutellier U</p> <p><u>Influence of endurance exercise on respiratory muscle performance</u></p> <p>Exercise Physiology, Institute of Human Movement Sciences, ETH Zurich, Switzerland</p> <p><i>Med Sci Sports Exerc</i>, 32(12): 2052 – 2058, 2000</p>
B1.00	<p>Johnson BD, Babcock MA, Suman OE, Dempsey JA</p> <p><u>Exercise-induced diaphragmatic fatigue in healthy humans</u></p> <p>John Rankin Laboratory of Pulmonary Medicine, Department of Preventive Medicine, University of Wisconsin, Madison, USA</p> <p><i>J Physiol</i>, 460: 385-405, 1993</p>