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Breathtaking results from new respiratory training device

Cyclists, triathletes and martial arts experts are just a few of the sporting icons whose chances of success could soar thanks to a new fitness and wellbeing product launched this month – Youbreathe. Youbreathe is the world's first portable device that delivers the benefits of vibrated training to the respiratory system. Using patented technology, Youbreathe develops the vital muscle groups in the chest and diaphragm that are often ignored in regular fitness and training sessions. Tests have found that inhaling and exhaling through Youbreathe for just five minutes a day can significantly improve performance, in some cases by up to 100 per cent.

Youbreathe works by delivering a vibrating pulse into the respiratory system that helps users breathe deeper and stronger. The diaphragm, abdominals and chest muscles work harder during the breathing cycle which leads to improved circulation, increased blood oxygenation and faster removal of carbon dioxide. "It has been scientifically proven that training the chest and respiratory muscles leads to significant improvements in breathing efficiency and body performance," Youbreathe chief technologist Dr Paul Sumners says. "With the addition of vibration to the training muscle, the performance benefits are off the scale compared to measurements recorded for normal training."

One of the first athletes to benefit from regular use of Youbreathe is Paul Mill, a bronze medallist at the 2003 World Masters Cycling Championships. Paul trialled Youbreathe while recovering from injury at Crystal Palace rehabilitation centre and, eighteen months on, has integrated it into his daily training programme. "After using it for six weeks my peak flow, a measure of the maximum amount of air the lungs can expel in one breath, rocketed to levels that I had never produced before," he says. "I've used breathing devices in the past, but with Youbreathe I started feeling the benefits from day one."

Dr Sumners says the sporting world is waking up to the advantages of vibration training. "People give up exercise because the effort they put in is greater than the perceived benefits," he explains. "Vibration increases the 'Exercise Return on Investment' or Ex-ROI by delivering noticeably quicker and better results". However, Youbreathe is not just

aimed at serious competitive athletes. “When we exercise there is an assumption that breathing takes care of itself,” he says. “The majority of people don’t see it as something they need to worry about and very few actually train their respiratory system – but that is changing. With the rising popularity of yoga, martial arts and tai chi, advocates of healthy living are realising the importance of better breathing.”

The potential for vibrated training has been further highlighted by a range of celebrities, including Madonna, Kylie Minogue, Natalie Imbruglia, Jonathan Ross and Simon Cowell, advocating the benefits of these techniques. “The devices these time-poor celebrities are using vibrate the whole body whilst performing regular exercises and mean that they can spend less time working out for the same results,” Dr Sumners explains. “Youbreathe targets the benefits of vibration to a much ignored but vital function for everyone’s fitness – the respiratory system.”

Other preliminary results suggest that using youbreathe increases blood flow to the brain and to the peripheral muscles. This could have implications for brain function and oxygenation of the body.

Technical Information Note

Respiratory muscle training via resistive loaded breathing (such as breathing through a small tube or against and airway resistance) has been shown to increase respiratory performance and fitness, and increase whole body endurance capacity (Boutellier & Piwko, 1992; Markov et al., 2001) and short-duration high-intensity time-trial performance (Volianitis et al., 2001) in healthy individuals. Additionally, respiratory muscle training has been used successfully in disease states such as asthma (Ritz, 2003), COPD (Scherer et al., 2000), coronary heart disease (Darnley et al., 1999), muscular dystrophy (Wanke et al., 1994) and multiple sclerosis (Klefbeck & Nedjad, 2003).

A relatively new development in the field of physical training is addition of vibration during training with benefits acutely (after 1 session of vibration exercise; Issurin & Tenenbaum, 1999) and long term (5 weeks of training; gains 300% greater than normal strength training; Issurin et al., 1994). Similar, if less dramatic, effects have been observed in different skeletal muscles using different methods of delivering the vibration stimulus. Until recently there had been only limited use of vibration stimulus to respiratory muscles. Fujie et al. (2002) demonstrated that vibrating the chest wall reduced dyspnoea and increased respiratory efficiency during exercise in patients with COPD. At Exoscience Ltd. we demonstrated that application of vibration during resistive breathing caused greater stimulation to the respiratory system than resistive breathing described above (Sumners et al., 2002). These results follow the predictions from skeletal muscle studies, which demonstrate that vibration during exercise is a far greater stimulus for improvement in respiratory performance than resistance exercise alone.

Youbreathe is the worlds first and only vibrated respiratory training device. Many athletes and sedentary users have reported dramatic improvements in respiratory performance, reductions in sense of effort and breathlessness during exercise and increased exercise performance. Many more studies are under way with prelim results showing the acute and chronic benefits of Youbreathe training. Clinical studies will begin in the New Year, specifically in asthmatics and respiratory limited patients.

Endorsements

"I was approached to use the Youbreathe early on this year to see if it would have any effects on my peak flow readings. I am an Elite level cyclist and have used this kind of breathing apparatus before, but the Youbreathe is different in that it uses vibration to enhance the breathing technique. I was a bit sceptical at first but after using it for 6 weeks my peak flow rocketed to levels that I had never produced

before. I now use the Youbreathe on a daily basis and I believe that this product has helped me to numerous wins this season.”

Paul Mill
Elite Masters Cyclist

“Success in sport requires an athlete to strive for optimal levels of performance through detailed and specific training modalities. Such an approach is particularly important in WTF Sport Taekwondo, a full contact Olympic sport where lack of preparation can have obvious consequences.

Taekwondo players from Jaguar Taekwondo have incorporated YouBreathe technology into their everyday training regime to try and enhance their performance, with excellent results. The vibration stimulus provided by YouBreathe appears to enhance 1. the athlete’s capacity for work and more importantly 2. recovery profiles both in competition (intra- and inter-fights) and in training.”

Dr Dave Cook
Senior Lecturer in Biomechanics
2nd Dan Taekwondo
Coach for Jaguar Taekwondo.