

POWER[®] breathe

the world's no.1 breathing trainerSM

Product information

The evolution of POWERbreathe Training



2001 Classic



2006 Medic



2006 Plus



2007 Ironman & IronGirl Plus



2009 ActiBreathe



2010 POWERbreathe K1



2010 POWERbreathe K2



2010 POWERbreathe K3



2011 POWERbreathe
KH1 & KH2 Medical



2011 POWERbreathe
K4 K5

POWERbreathe Information

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POWERbreathe Inspiratory Muscle Training

POWERbreathe is one of the most time efficient training devices at the disposal of today's consumer, as well as, the health, fitness and sports professional.

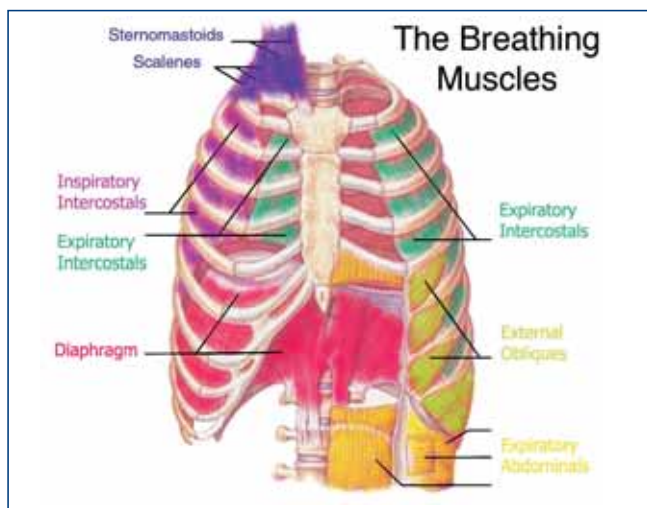
Only 30 breaths twice daily, less than 5 minutes training has been clinically proven to improve exercise performance and reduced breathlessness, in as little as 4 weeks.

Why POWERbreathe?

When we breathe, the diaphragm and intercostal muscles act together like bellows to pump air in and out of the chest. To breathe in, these muscles contract to expand the chest cavity, causing a pressure drop into which the air flows. At rest we breathe approximately 12 litres of air per minute, but during heavy exercise this can rise to over 150 litres per minute, and in elite athletes, this can be as high as 220 litres. Due to the increase in oxygen demand during exercise and physical activity the breathing muscles begin to work harder and just like any other muscle they fatigue, limiting performance.

What is POWERbreathe?

POWERbreathe works by making the user breathe against an adjustable, calibrated resistance. The concept of training is called Inspiratory Muscle Training or IMT. The breathing muscles work harder to open a pressure threshold valve inside the POWERbreathe. This valve acts as a weight against the breathing muscles. Over a short period of time the breathing muscles adapt to cope with lifting the weight.



POWERbreathe For:

Fitness and Sports Performance

- POWERbreathe has been scientifically proven to delay limb fatigue during intense activity by preventing the inspiratory muscles from diverting blood away from exercising limbs during exercise
- POWERbreathe improves time trial performance and endurance when used as part of a preparatory Warm Up
- POWERbreathe warrants improvements in repeated sprint recovery by up to 7% making it ideal for team sports and multi sprint activities.
- POWERbreathe training has been proven to improve lactate clearance by as much as 16% when used as part of a post exercise Cool Down programme

- Independent studies have shown that time trial performance improves elite rowing and cycling performance by as much as 4.6%. That slashes almost 3 minutes of a 40km cycling time trial and gives a winning margin of 60m in a 2000m rowing race
- POWERbreathe can also be integrated into simple postural specific training to replicate the demands of a specific sport on the respiratory system

Uniformed Services and Occupational Health

- Physically demanding work activities can place significant demand on the respiratory system. POWERbreathe training strengthens the breathing muscles reducing breathlessness and exercise fatigue

- POWERbreathe strengthens and develops the muscles of the thorax, rib cage and diaphragm. This results in a reduction in breathing effort perception and improved performance when carrying heavy loads and wearing protective clothing such as stab vests, NBC protection suits and protective helmets
- Respiratory protective equipment can significantly increase breathing effort, POWERbreathe aids in improving operational performance when wearing respiratory equipment and improved cylinder air use in simulated fire fighting by 8%

Inspiratory Muscle Trainers



POWERbreathe K-Series

The World's 1st Intelligent Digital Breathing Trainer

The new innovative POWERbreathe K-Series of electronic inspiratory muscle trainers are designed to deliver a superior breathing training experience.

POWERbreathe auto-optimising IMT technology, the next generation in breathing training

Breathing physiology indicates that when your lungs are empty the breathing muscles are at their strongest. However, as they fill up with air they start to lose strength; therefore at high loads the breathing muscles can't maintain a full contraction throughout an entire breath.

The POWERbreathe K-Series provides the user with variable valve loading to overcome this. A tapered loading resistance matches the contraction curve of the breathing muscles throughout the entire breath. This enables the user to complete a full breath and muscular contraction at an optimal resistance.

Peace of mind with POWERbreathe K-Series

The POWERbreathe K-Series is an exclusive, adaptable and personalised respiratory coaching system offering many unique training features:

- Personalised Auto-optimising technology, IMT, that adapts specifically to users breathing function
- Advanced variable load training for improved training performance
- Performance monitoring capability for analysing breathing muscle strength, power and training volume
- Training intensity selector for creating specific and tailored training
- Breathe-Link performance monitoring software*
- Built in breathing guidance parameters to train, warm-up* and cool-down*
- Integrated pacing metronome, breath counter and end of session indicator
- Easy maintenance and user friendly design
- Rechargeable by both mains and pc

*Availability of features dependant on model

Also available: POWERbreathe K-Series Portable Systems for Sports, Fitness, Education and Health Professionals, utilizing POWERbreathe K-Series unique multi-user options. (Models offered are K5 or KH2)



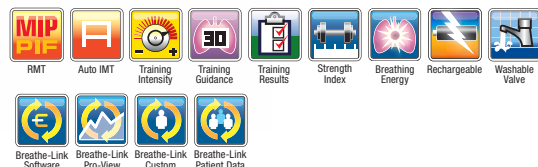
Model K5

“ Accurate load setting is key to ensuring the best possible training outcomes. The ability of the K-Series to deliver this automatically, as well as monitoring progress, make it a quantum leap in breathing muscle training. ”

Professor Alison McConnell, PhD, FACSM, professor of applied physiology centre for sports medicine and human performance, Brunel University. (UK)



Options available: 1. Sports Team Pack. 2. Education Pack. 3. Fitness Club Pack. 4. Medical and Home Healthcare Pack.



POWERbreathe K-Series

POWERbreathe[®] KSERIES

Research and Development

The POWERbreathe K-Series has been researched, developed and designed in the UK in partnership with top UK sport, health and exercise scientists over the past 7+ years.

Technology

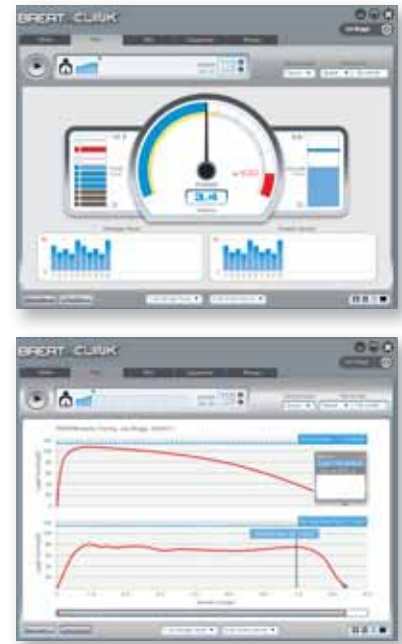
The POWERbreathe K-Series uses state of the art piezo-resistive pressure sensing technology to take precise measurements of respiratory pressure 500 times/second. The triple-aperture rotary valve system makes up to 4000 precision movements every second. (Patents Pending)

Medical classification

POWERbreathe K-Series is a Class 1 medical device as classified under the Medical Device Directive 93/42/EEC, and complies with EN 60601-1:2006 regarding medical electrical equipment.



Model KH2



BREATHELINK[™] - Examples
LIVE FEEDBACK SOFTWARE

"The World's 1st Intelligent Digital Breathing Trainer"

Training Technology Features:



Auto IMT: The POWERbreathe K-Series Auto-optimising Inspiratory Muscle Training system automatically adapts to your personal training requirements.



Training Intensity: The training intensity adjustment option allows resistance to be manually set from 10 to 200cmH₂O to suit your personal training requirements.



Training Guidance: The K-Series training guidance system provides breathing pacing guidance, displays the number of breaths remaining in your training session and informs you when the session is complete.



Warm-up & Cool-down mode: Automatically sets the optimal resistance for inspiratory muscle warm-up and cool-down.

Training Feedback and Testing Features:



Training Results: Provides detailed breathing training feedback including Load (cmH₂O), Power (Watts) and Inhaled Volume (Litres).



Strength Index: Calculates your inspiratory muscle strength (cmH₂O) based upon your peak inspiratory flow. Strength index is rated in comparison with your predicted value.



Single Breath Test: Measures inspiratory muscle strength, peak inspiratory flow rate and inhaled volume in a single breath. Rates inspiratory muscle strength (Poor, Fair, Average, Good, Excellent) in comparison with your predicted value.



Training Index: Displays the percentage effectiveness and effectiveness rating (Poor, Fair, Average, Good, Excellent) of your breathing training session based upon the amount of work you achieved.



Breathing Energy: Measures the mechanical work of breathing during your breathing training session. Breathing energy combines the force exerted by your inspiratory muscles and the volume of air inhaled.



Training History: Displays a graphical history of your last 36 training sessions allowing you to review trends and previous personal best results.

Technology Features:



Washable Valve: The K-Series valve head can be removed for cleaning using POWERbreathe cleansing solution (sold separately).*



You and I Option: Interchangeable Valve Head option for multiple users (Additional valve heads sold separately).



Rechargeable: Rechargeable power system with auto power-off and charge level indicator.

K-Series Health Features:



Multi-user Filter Option: Compatible with TrySafe[™] bacterial/viral filters for multiple users (sold separately).*



Respiratory Muscle Testing (RMT): Maximum Inspiratory Pressure and Peak Inspiratory Flow tests for inspiratory muscle assessment.

Breathe-Link Features:



Breathe-Link Software: PC connectivity via USB enables real time training and performance testing. Select specific training and testing parameters and then assess inspiratory muscle condition, training progress and try and beat previous scores.



Breathe-Link Custom: Allows you to create and upload your own personalised breathing training sessions.



Breathe-Link Pro-View: Use the Breathe-link Pro-View for detailed, simultaneous plotting and analysis of all inspiratory muscle training data.



Breathe-Link Patient Database: Quickly access patient data using the Breathe-Link patient database interface.

Please call or visit our website for more details



Multi-user Filter Option

Multi-user Filter Option: TrySafe[™] bacterial/viral filter is compatible with all POWERbreathe models therefore allowing for multiple users.

Product code: PBFIL



Spacer: for use with filters when using K-Series models.

Product code: PBSPACE



POWERbreathe K-Series

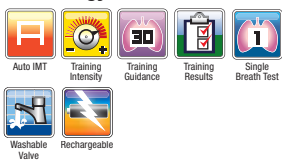
Probably the most portable, efficient and effective fitness and performance training equipment available, anywhere!



1 POWERbreathe K1

Entry-level K-Series breathing trainer with essential state of the art training features.

Technology features:

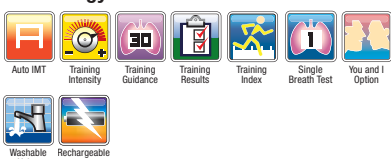


Product code: PBK1

2 POWERbreathe K2

Cutting edge POWERbreathe testing technology enables performance monitoring to maximize training performance.

Technology features:



Product code: PBK2

3 POWERbreathe K3

Take breathing training to the next level, review and monitor breathing training over 36 days and utilize specific breathing warm-up and cool-downs to boost performance.

Technology features:

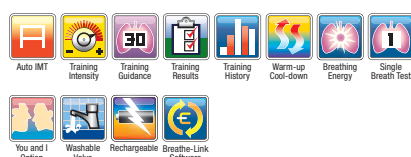


Product code: PBK3

4 POWERbreathe K4 with Breathe-Link K4 Software

Maximize training with Breathe-Link performance monitoring software and PC interface. Train, Analyse, Improve.

Technology features:



Product code: PBK4

5 POWERbreathe K5 Ironman with Breathe-Link K5 Software

The ultimate in breathing training technology. Manage and store customised training routines and utilise specific performance testing parameters. Train, Analyse, Compare, Improve.

Technology features:



Product code: PBK5

POWERbreathe K-Series products can be used in Group / Team situations, by utilising the specially designed:-



6 Valve head and mouthpiece

Product codes: PBKHVGR Valve head-Grey
PBKHVBLK Valve head-Black
PBKHVBLU Valve head-Blue



POWERbreathe Classic and Plus, Ironman and Iron Girl



Ironman has been a respected name in triathlon since its inception and is regarded as one of the world's most challenging endurance events made up of a 3.8km swim, 180km bicycle race and a 42.2km marathon!

The special edition POWERbreathe Ironman and Iron Girl models are the official breathing trainers of Ironman and Iron Girl and are used extensively by some of the world's top athletes.

These exclusive POWERbreathe models are approved to bear the Ironman and Iron Girl brand and feature all the benefits of the POWERbreathe plus range. Available in 3 levels of resistance so anyone from an aspiring spectator to an elite performer can benefit from better breathing strength, power and endurance.



POWERbreathe Ironman Plus (Black)

The Special Edition POWERbreathe Ironman Plus is an official Ironman licensed training device designed to improve performance.

Product codes:	PBIMLR	Light resistance	
	PBIMMR	Medium resistance	
	PBIMHR	Heavy resistance	

POWERbreathe Iron Girl Plus (Pink)

The Special Edition POWERbreathe Iron Girl Plus is an official Iron Girl licensed training device designed to improve performance.

Product codes:	PBIGLR	Light resistance	
	PBIGMR	Medium resistance	
	PBIGHR	Heavy resistance	

POWERbreathe instructional DVD and carrying pouch included.



POWERbreathe Inspiratory Muscle Trainers and Breathing Trainers have been developed and validated by professional sport scientists and world-leading researchers at Loughborough, Birmingham and Brunel Universities (UK), and are unparalleled in the world of respiratory training.



POWERbreathe Plus

The POWERbreathe Plus range contains all the benefits of the POWERbreathe Classic range but has been developed with new and exclusive design features:

- Variable easy read resistance dial for adapting and monitoring your training
- Softer, more comfortable antibacterial mouthpiece
- Ergonomic easy to hold design
- 65% improvement in airflow dynamics
- Soft touch nose clip
- Available in three variable resistance levels

Product codes:

PBPW	Light resistance	
PBPF	Medium resistance	
PBPS	Heavy resistance	

POWERbreathe Classic

The original and popular POWERbreathe Classic series is the result of intense research, trials and development by scientists at Birmingham and Loughborough Universities in the UK, and was launched in 2001.

- Entry level model, cost effective access to easier breathing and better sports performance
- Variable resistance dial for increasing levels of lung muscle strength
- Available in 3 levels of variable resistance; light, medium and heavy

Product codes:

PBCW	Light resistance	
PBCF	Medium resistance	
PBCS	Heavy resistance	

POWERbreathe's "TrySafe" filter option allows for multi-user group/team use. Product Code: PBFILTER

POWERbreathe[®] MEDIC

makes breathing easierSM



The use of Inspiratory Muscle Training (IMT) is now globally accepted as a functional training tool for athletic performance, POWERbreathe has also brought the benefits of IMT to the clinical professional. POWERbreathe Medic is an evidence based clinical IMT device for patients for which breathlessness is the limiting factor in everyday tasks. Clinically proven and designed to maximize the benefits of IMT, POWERbreathe Medic can be added to patient rehabilitation programmes reducing breathlessness by up to 36%, increasing exercise tolerance by up to 28% and quality of life by up to 21%.

POWERbreathe Medic:

- POWERbreathe is an Inspiratory Muscle Trainer for treating COPD, Asthma, Cardiac Rehabilitation and General Health Rehabilitation
- POWERbreathe is evidence based and clinically proven by world class researchers across the globe
- POWERbreathe is drug free, with no side effects or contraindications
- POWERbreathe can be used as part of pulmonary rehabilitation or as a standalone treatment
- POWERbreathe reduces medical expenditure by lowering primary care consultations, hospital length of stay and drug usage
- POWERbreathe improves quality of life and exercise tolerance
- POWERbreathe only takes 5-15 mins of training per day depending on medical condition

Product code: PBM



Asthma

Reduce β_2 -agonists consumption by up to 79%

Reduction in β_2 -agonist use¹



- FEV₁ improved by 14%² (p<0.005)
- Absence from school/work reduced by ~95%² (p<0.05)
- Emergency hospitalisations reduced by ~75%² (p<0.05)

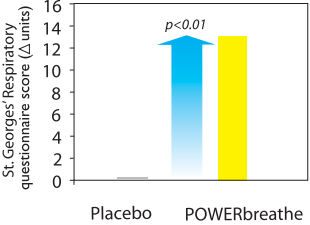
Inspiratory Muscle Training – Benefits

- Inspiratory muscle strength up by 27%*
- Improves exercise tolerance up to 28%*
- Reduces breathlessness up to 36%*
- Fewer GP visits reduced up to 23%*
- Improves quality of life up to 21%*

COPD

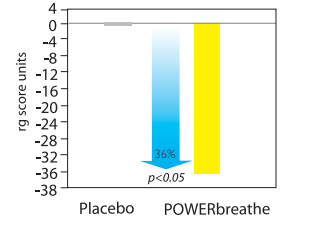
Improve dyspnoea by 36%

Improvement in Quality of Life¹



Improve dyspnoea by 36%

Improvement in dyspnoea score¹



POWERbreathe Healthcare and Medical Series

POWERbreathe[®] K SERIES

The Worlds 1st digital, hand held respiratory muscle training, assessment and monitoring device, for medics and researchers.

Designed specifically for the patient, healthcare and/or medical professional.

POWERbreathe K-Series Healthcare products use state of the art technology to deliver safe and effective breathing training, monitoring and assessment.

The POWERbreathe KH1 and KH2 offer advanced portable hand held electronic breathing training that can be used bedside, on a hospital ward, as part of a pulmonary rehabilitation programme or within a doctors office or for mobile home healthcare services.



1 POWERbreathe KH1

Intelligent, portable hand-held respiratory muscle training and assessment device.

Features:

1. Respiratory Muscle Testing (RMT)
2. Auto-optimising IMT technology
3. Training intensity selector
4. Training guidance system
5. Training session display
6. Test mode (S-Index)
7. Training index results (T-Index)
8. Washable valve system
9. Multi Person Usage (MPU)

Product code: PBKH1



Features included:



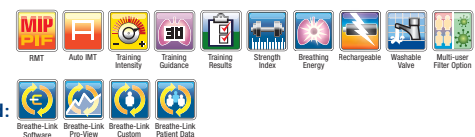
2 POWERbreathe KH2 with Breathe-Link KH2 Software

Intelligent, hand-held respiratory muscle training and assessment device with specific healthcare related software package. Live, real time training session display.

Features:

1. Respiratory Muscle Testing (RMT)
2. Auto-optimising IMT technology
3. Training intensity selector
4. Training guidance system
5. Training session display
6. Test mode (S-Index)
7. Training index results (T-Index)
8. Washable valve system
9. Multi Person Usage (MPU)
10. PC Sync
11. Downloadable multiphase and customisable training
12. Breathe-Link data base, Medical testing capabilities

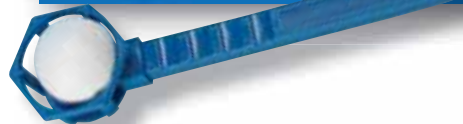
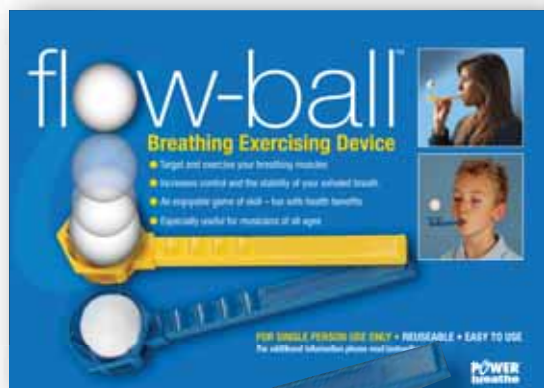
Product code: PBKH2



Features included:

Better Breathing Products

POWERbreathe has expanded its range of quality breathing training and respiratory care products by teaming up with leading product developers to service the needs of consumers and professionals involved in Sport, Fitness, Health, Education, Research, Corporate Fitness and Occupational Health, Uniformed Services, Life Coaching/Stress Management, Sleep Therapy, Wind Musicians, Singers, and more...



1. Flow Ball

Breathing Exercising Device

- Exercises your breathing muscles
- Increases control and the stability of your exhaled breath
- Easy to use, effective and great fun
- Popular with children
- Great for adults and musicians

Product code: PFLOW



2. Shaker Classic:

Personal Mucus Clearance Device

- Offers simple and convenient relief from excessive mucus
- Can be used for chronic conditions such as COPD, asthma, emphysema and acute problems like chesty coughs, flu and bronchitis
- Affordable, easy to use single user model which can be used at home or on the move

Product code: PBSHC



3. Shaker Deluxe:

Personal Mucus Clearance Device

- Respiratory device for mobilising pulmonary secretions such as mucus and catarrh
- Uses the latest innovative design technology
- Produces vibrations in the chest cavity to 'shake' stubborn mucus loose
- Aids expectoration, increases lung efficiency, helping to reduce breathlessness and fatigue
- Affordable, easy to use single user model, ideal for home healthcare or on the go

Product code: PBSHD



4. Respirom

Home Therapy for Breathing Difficulties

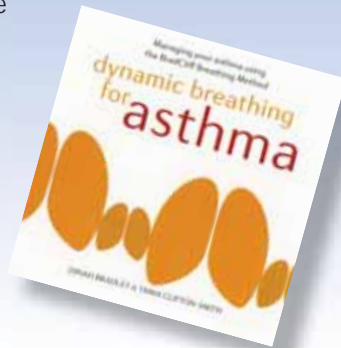
- Fully adjustable resistance level
- Exercises and strengthens the breathing muscles
- Helps prevent bronchial and pulmonary infections
- Encourages deep breathing, which can aid in relieving excess mucus
- Excellent for lowering stress levels
- Easy to use and clean

Product code: PRES

Dynamic Breathing Book

A fully revised, updated (and renamed) edition of the successful 2002 Breathing Works for Asthma. Featuring the POWERbreathe, this book is the asthma sufferer's indispensable companion. In recent years, asthma patients may have been well informed about their drug management but less emphasis has been placed on physical coping skills and the importance of the correct use of the muscles of breathing. Dynamic Breathing for Asthma takes you through a step by step breathing retraining process, which can help you to reduce medications, reduce stress levels, exercise comfortably and most importantly - breathe effectively.

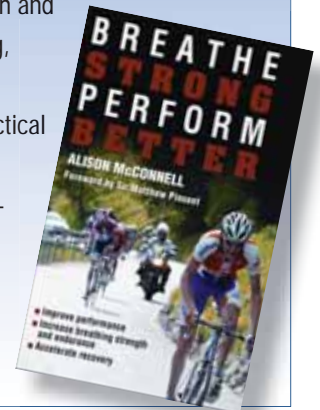
Product code:
PB904



Breathe Strong Book

Breathe Strong, Perform Better explains how anyone, from everyday exercisers to elite athletes, can use breathing training to increase power and comfort, improve performance, accelerate recovery, and reduce injury risk. With easy-to-use programmes and sport-specific workouts, this is your guide to achieving efficient breathing and peak fitness. In this comprehensive guide, the world's leading authority on breathing muscle training Professor Alison McConnell, shows you how to apply the latest scientific research and case studies to maximize training, conditioning and performance. Includes detailed instruction, practical advice and easy-to-use sample protocol programmes for you to – Breathe Strong, Perform Better.

Product code: PB902



Breathing Matters Book

Breathing Matters is a revolutionary book written by Dr Jim Bartley one of New Zealand's top Ear, Nose and Throat surgeons. He believes that good breathing patterns can dramatically improve the lives of people with major diseases such as heart disease, asthma and depression and migraine. Breathing well helps us relax, normalises body biochemistry, reduces muscle pain and allows the re-establishment of normal posture and movement.

Product code: PB903



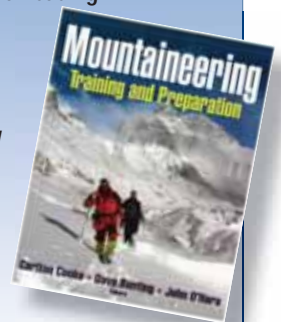
Moutaineering Trainer and Preparation Book

Edited by Carlton Cooke, Dave Bunting and John O'Hare – Highly respected sport and exercise scientists, as well as mountaineers, having worked with several leading expeditions, including: the British Army Everest West Ridge 2006 expedition.

"I would recommend this book to anyone who is interested in mountaineering or trekking and I would specifically recommend that anyone who is going to altitude either on a charity trek or a more serious expedition read Chapter Five on First Aid and A climatisation and Chapter Six on Training." PJR

"Well worth the money - particularly given the expertise behind it!" JH

Product code: PB905



Also Sprach Arnold Jacobs (Book)

- A developed guide for Brass Wind Musicians
- Compiled by Bruce Nelson incl. common ideas and variations from which musicians have benefited

Product code: PB901



POWERbreathe Press Coverage

“ POWERbreathe has a proven track record in developing the endurance and performance of our athletes across the world. We are seeing significant improvements in our athletes breathing and performance ”

Tristan Brown, team manager, Timex Multisport Team



“ The POWERbreathe device has been integrated into the players training, and rehabilitation warranting great improvements in breathing strength, power and recovery. ”

Hew Davies, head conditioning coach London Wasps

The initial set-up is easy and using the device thereafter is also a doddle, as there are only two navigation buttons. And it works: our test results showed a demonstrable difference in lung muscle strength after just a couple of weeks' use.

“ The POWERbreathe training device was used by the majority of the team and the feedback was that it helped them immensely in their individual preparations for the Expedition! ”

John O'hara Senior lecturer in sport and exercise science at Leeds Met University and fitness advisor for the army expedition to Everest

The latest version of POWERbreathe's training range can help you to improve your breathing during a run and enable you to train harder for longer.



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POWERbreathe events around the world

Breathing Trainers / Inspiratory Muscle Trainers

Vienna Music Festival, 2011



Tokyo, Japan May 2011



Puchar Kmity Swimming Event, Krakow, Poland May 2011



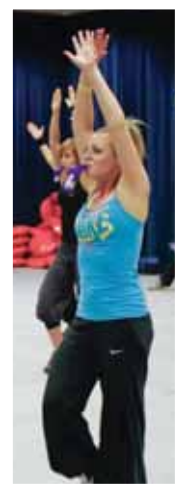
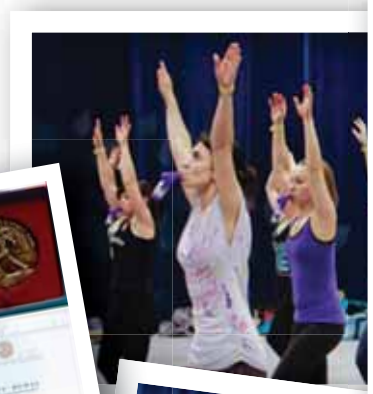
FitPro, Loughborough University, UK May 2011



Cycle Expo 11. Czech Republic 2011



Fitness Expo, Pozna, Poland May 2011



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www.powerbreathe.com

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E & OE