Benefits of HYPOXcontrol

- » Portable interval altitude therapy device for customised altitude therapy plans
- » Altitude simulations of up to 6,000 metres at intervals with concentrated oxygen
- » Real time monitoring of all relevant vital signs
- » Touch screen for intuitive and autonomous therapy control
- » Biofeedback for determining the personal tolerance levels for changes in altitude
- » Intelligent analysis software for fully documenting therapy results
- » Database for saving profiles and therapy data
- » Saving personal data on a chip card and network connection capabilities
- » Certified medical device

Medical fields and indications (excerpt)

Cell metabolism and vascular reaction

- » Erythropoiesis is enhanced by the increased secretion of erythropoietin (EPO), thereby improving oxygen transport capacities.
- » Improvement of microcirculation through the increased angiogenesis factors: VEGF, MMP1, MMP2
- » Higher energy supply resulting from the increase in the number of mitochondria as well as the glycolytic system & glucose transporters
- » Increases insulin sensitivity
- » Concomitant therapy for metabolic syndrome: type II diabetes mellitus, obesity and high blood pressure
- » Improved wound and bone healing
- » Optimises rehabilitation time after surgical interventions and injuries
- » Supportive effects when strengthening the immune system
- » Concomitant treatment for Lyme disease

Cardiovascular system

- » Increases the body's physical and mental endurance levels
- » Increases endothelin & adrenomedullin, whereby vascular tone is increased and capillarization is improved
- » Increases cardiac output per minute
- » Lowers blood pressure over the long-term

Respiratory system

- » Concomitant treatment and therapy in cases of impaired pulmonary ventilation
- » Optimises respiratory function in cases of asthma, COPD and obstructive sleep apnoea

Nervous system and psyche

- » Concomitant treatment for pain therapy
- » Therapy and concomitant treatment for chronic fatigue syndrome (CFS), burnout syndrome and depression
- » Increases a person's ability to concentrate

Positive metabolic effects of hypO₂xia on the body

Increases physical fitness

» Increases resting lactate levels » Increases insulin sensitivity » Lowers blood pressure

The transport of oxygen is improved Increased EPO in the kidneys » Additional red blood cells are produced in the bone marrow

> The body is placed under reduced oxygen conditions. These lower levels of oxygen lead to signal transmission via the

hypO_xia-inducible factor HIF-1 Alpha

Increased vascularization

» Increases the angiogenesis factors VEGF, MMP1, MMP2, endostatin

» Increased capillarization

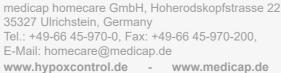
Increased iron metabolism

» Increases production of transferrins and cerruplasmins

» Promotes erythropoiesis

Improves the supply of oxygen to the body





echnical changes and errors excepted. Ref. A 04.2016

HYPOXcontrol



The efficient altitude therapy system with concentrated oxygen

The energy supply for cells is improved

» Increased production of the glycolytic system & glucose transporters

Increasing number of mitochondria

Vascular tone is increased

» Increases endothelin & adrenomedullin

» Improves blood circulation



Flexible & Effective:

Diabetology Angiology Vascular Medicine Wound Healing Cardiology **General Medicine Sports Medicine** Pulmonology Adjuvant Therapies **Alternative Medicine** Neurology

medicap

HYPOXcontrol

HYPOXcontrol

The efficient altitude therapy system with concentrated oxygen

Innovative & Portable

HYPOXcontrol is an efficient and versatile altitude therapy system. Altitude interval therapies are recommended for any patient who wants to effectively **strengthen their cardiovascular system during rehabilitation, while putting little strain on muscles and joints.** Positive rehabilitation results can be achieved quickly with this system. The one-of-a-kind HYPOXcontrol **portable therapy system** gives patients air with reduced oxygen levels – $hypO_2xic$ – to breathe during the first interval and provides them with oxygen-enriched air – $hyperO_2xic$ – in the second interval. With this **interval altitude therapy concept**, the body's own altitude acclimatisation effects can be utilised to quickly achieve positive rehabilitation results, and it can be used as a preventative therapy for a wide array of medical fields.

Automatic & Simple

The unique HYPOXcontrol **biofeedback** is the first step before creating a personal treatment and therapy plan. The vital signs are monitored during a step test and the current altitude therapy level is automatically determined. A personal and **safe altitude therapy level** is selected for the patient based on this test.

		0		Niterhalning - Enablurgen Kolgonism			-	
0	ŏ			4 (2 H . H .		Papanin	0	
99				Bolomade, P		Ngpartoka	0	
8				99	N (1)	Zyhinn		
63	-			72	-		•	

Intuitive & Personalised

The therapist can configure a **personalised hypO**₂**xic and hyperO**₂**xic interval therapy** plan on the touch screen display by using the intuitive software interface, and the settings can be saved on a chip card.



101:100 Min.

HYPOXcontrol can be used flexibly in any professional hospital or institutional setting

medicap

HYPOXcontrol

4 54 🚄



Safe & Reliable

All relevant vital signs are depicted on a real-time graphical overview during the biofeedback phase and the entire altitude interval therapy session; they are monitored **reliably and safely** using the **pre-set safety limits**.

Compatible & Progressive

An **existing computer system** can be easily used to **analyse rehabilitation results** as efficiently as possible.





Effective & Efficient

In addition to taking conventional vital signs, such as the heart rate and oxygen saturation levels, the device also indicates, saves and evaluates **unique vital signs,** like heart rate variability and the transcutaneous partial pressure of oxygen.



Well-designed & Clearly Organised

While using the **analysis software interface**, all interval altitude therapy sessions can be documented in a **clearly organised therapy report**, which can be distributed as a PDF document. Moreover, up to five different therapy sessions can be shown on a tabular and graphical overview for comparison and analysis purposes.

