INTERMITTENT HYPOXIC THERAPY

This treatment is a stimulation of the body's own natural defense mechanisms as distinct from conventional medicine's method of chemical intervention. IHT is a novel approach employing the benefits of cyclic exposure to hypoxic and normoxic air as opposed to extended exposure to a hypoxic environment. The body's repeated adjustment between the low oxygen and ambient conditions elicits a greater and more beneficial physiological response than prolonged hypoxic exposure. A typical course of treatment comprises up to 10-30 daily sessions of between 30 and 120 minutes duration.

With a history of over twenty years there is much evidence to support the remarkable health benefits of this technique.

This technique does not deny the role of oxygen in human life. On the contrary, it has been proven that hypoxic training significantly improves oxygen metabolism in the body. Transient lack of oxygen stimulates the pro-oxidant system in the body. Short-term exposures to mild hypoxia stimulate the body's defense mechanisms and produce numerous beneficial responses in our health. This training is furthermore a very potent means of endurance improvement and stimulation of the antioxidant system.

The evidence of physiological alterations, produced by hypoxic stimulation, is seen at all levels of the human body. After a course of IHT the following physiological changes are apparent:

- Facilitated erythropoietin (EPO) production and possibly increased hematocrit.
- Improved immunological status
- Improved blood biochemical values
- Stimulated sympatho-adrenal system
- Cardiovascular system adaptation resulting in:
    - Vasodilatation, increased capillary density, and reduced peripheral resistance
    - Decreased mean arterial blood pressure and heart rate.

Respiratory system adaptation resulting in:

- Improved parameters of external respiration
- Increased Hypoxic Ventilatory Response
- Increased minute ventilation, total and vital lung capacity

Hypoxic training improves the efficiency of systems responsible for oxygen transport and utilization at all levels, from cell to organism. It has also been shown to:

- Protect the brain from oxidative stress
- Improve psycho-physiological status

Efficacy of Hypoxytherapy in the treatment of different diseases in patients in the prophylaxis clinic "Tamara", Murmansk, Russia.
[Kononenko et al, 1997]

N	Conditions	All cases	From 10 to 15 IHT sessions			From 16 to 25 IHT sessions		
			In all	Improvements	Without changes	In all	Improvements	Without changes
1	Ischemic Heart Disease (IHD)	88	55	52	3	33	32	1
2	IHD + Hypertension	6	4	3	1	2	2	-
3	Hypertension	116	77	72	5	39	31	2
4	Circulatory dystonia	46	37	35	2	9	9	-
5	Bronchial asthma	10	4	4	-	6	6	-
6	Chronic bronchitis	59	43	41	2	16	16	-
7	Ulcerative disease of stomach, duodenum	42	28	27	1	14	14	-
8	Liver and Pancreatic diseases	31	25	23	2	6	6	-
9	Diabetes mellitus	3	3	3	-	-	-	-
10	Toxemia of pregnancy	2	-	-	-	2	2	-
11	Anemia	1	1	1	-	-	-	-
12	Diseases of locomotion	217	161	150	11	56	55	1
13	Diseases of urinary tract	20	13	13	-	7	7	-
14	Others	46	34	32	2	12	11	1
	In all	687	485	456	29	202	197	5
	%		100	94	6	100	97.5	2.5

The results of IHT treatment ('Mountain Air" treatment) in the prophylaxis clinic "Tamara", Murmansk, Russia. [Kononenko et al, 1997] (the number of complaints in % to overall number of patients)

N	Complaints	Before IHT treatment	After IHT treatment	p
1	Headache	39.2 ± 1.5	7.1 ± 0.8	< 0.001
2	Heart aches	36.3 ± 1.5	4.4 ± 0.6	<0.001
3	Breathlessness	24.7 ± 1.3	13.7 ± 1.0	<0.001
4	Suffocation fits	4.1 ± 0.6	0.7 ± 0.3	<0.001
5	Cough	20.1 ± 1.2	4.6 ± 0.6	<0.001
6	Insomnia	33.3 ± 1.4	3.3 ± 0.5	<0.001
7	Irritation	37.5 ± 1.5	6.6 ± 0.8	<0.001
8	Fatigue	72.7 ± 1.4	17.2 ± 1.1	<0.001
9	Impaired work capacity	58.0 ± 1.5	5.7 ± 0.7	<0.001
10	Unpleasant sensations	70.8 ± 1.4	7.8 ± 0.8	<0.001
11	Joint aches	37.0 ± 1.5	15.4 ± 1.1	<0.001
12	Depressed mood	37.6 ± 1.5	9.3 ± 0.9	<0.001

The results of clinical applications of IHT indicate that this therapy is beneficial in the treatment of various chronic diseases. Assuming that IHT increases the capacity of the antioxidant system, this explains the mechanism of clinical benefits of IHT treatment in degenerative diseases, as this treatment corrects the imbalance between pro - and antioxidants in the body.

Sources: websites related to medical applications of IHT

www.hypoxia.ru
www.hypomed.ch
www.hypoxia.at