



HYPOXICO² **ALTITUDE TRAINING SYSTEMS**

THE WORLD LEADER IN ALTITUDE TRAINING



ABOUT HYPOXICO

Hypoxico, Inc. first pioneered simulated altitude training systems by patenting normobaric hypoxic equipment (hypoxicator) for athletic performance enhancement and general wellness back in 1996. Over the years, Hypoxico has become known among elite athletes, trainers, universities, and the military as the company developing and supplying the highest quality and most technologically advanced equipment available today.

WHAT MAKES HYPOXICO DIFFERENT?

Hypoxico, Inc. is the founder and sole patent holder of hypoxic technology, and we continue to be the only company that not only makes its own equipment but continues to develop new products and accessories.

Hypoxico, Inc. is currently run by a dedicated team of former college athletes, elite mountaineers, and pro ultrarunners. We maintain strong relationships with each of our distributors supplying Hypoxico equipment throughout the world and look forward to working with and supporting others in the future.

HYPOXICO PATENTS

As the pioneer in simulated altitude training technology, Hypoxico was the FIRST company to obtain patents pertaining to the creation and application of hypoxic air.

Hypoxico wrote and owns the rights to the following patents:

- **US No. 5799652** "Hypoxic room system and equipment for hypoxic training and therapy at standard atmospheric pressure"
- **US No. 5850833** Apparatus for hypoxic training and therapy
- **US No. 5887439** Hypoxic clean room systems for industrial applications
- **US No. 5924419** Apparatus for passive hypoxic training and therapy
- **US No. 5964222** Hypoxic Tent System
- **EU Patent No. EU 95985201** "Hypoxic room system and equipment for hypoxic training and therapy"
- **CANADIAN Patent No. 2,227,444** "Hypoxic room system and equipment for hypoxic training and therapy"

THE 3 METHODS OF ALTITUDE TRAINING



1. EXERCISING AT ALTITUDE

THE BENEFITS

The body works to overcome the immense challenge of exercise at altitude – both aerobic and anaerobic – through valuable adaptations that lead to improved performance, fitness, and health.

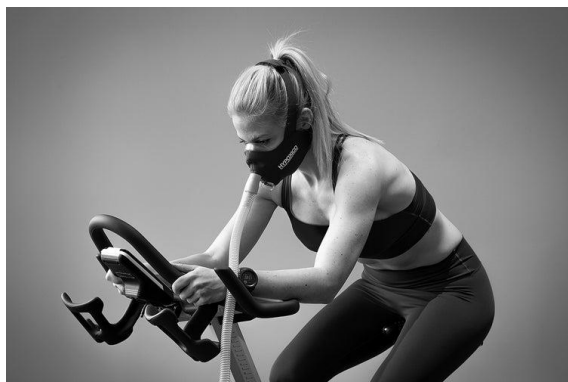
In addition, it allows for intensified cardiovascular exercise to be performed with a reduced load on the musculoskeletal system. This is especially useful for minimizing fitness loss after an injury.

HOW IT'S PERFORMED

By exercising in an altitude chamber, an exercise cubicle tent, or while wearing a training mask connected to an altitude generator.

INTERMITTENT HYPOXIC TRAINING (IHT)

Also known as hypoxic exercise, this altitude training method involves performing workouts – either aerobic or anaerobic – with reduced oxygen intake.



TRAIN HIGH

Exercising at altitude is an intense physiological challenge that forces the body to adapt in ways that lead to increased performance, fitness, and health. It also allows for intensified cardiovascular exercise to be performed with a reduced load on the musculoskeletal system, which is especially useful for maintaining fitness after an injury.

Hypoxic exercise is often performed as part of a Live Low, Train High (LLTH) routine, which simply involves living at low altitude (like most people do) and exercising at altitude as a supplement to normal workouts.

Live High, Train High



Decades of scientific research have shown the following physiological benefits to occur as a result of exercising at altitude:

- Increased aerobic capacity (VO2 Max)
- Increased lactate threshold
- Increased time until exhaustion
- Increased strength
- Increased power output
- Increased mitochondrial density and production.

THE BENEFITS

BENEFITS CONTINUED

- + Improved repeated sprint speed and distance ^{12, 13}
- + Reduced fatigue ^{9, 10}
- + Increased growth hormone concentration ¹⁰
- + Increased muscle thickness, cross sectional area, and lean body mass ¹⁶⁻¹⁹
- + Improved pH regulation ^{8, 35, 46}
- + Improved body composition ⁴⁷⁻⁵⁰
- + Reduced body weight and body fat percentage ^{55, 56}



2. SLEEPING AT ALTITUDE

THE BENEFITS

Sleeping at altitude triggers an increase in erythropoietin (EPO) production, which enhances the oxygen-carrying capabilities of blood through a subsequent increase in red blood cell production and hemoglobin concentration. This adaptation results in a greater tolerance for the reduced oxygen intake experienced at high altitudes and facilitates an improvement to aerobic performance through a Live High, Train Low routine.

HOW IT'S PERFORMED

By sleeping in an altitude tent connected to an altitude generator, or in a bedroom converted to an altitude chamber.

PROLONGED HYPOXIC EXPOSURE (PHE)

Also known as hypoxic sleep, this altitude training method involves spending at least 8 hours per night in an oxygen-reduced environment.



LIVE HIGH

Sleeping at altitude triggers an increase in erythropoietin (EPO) production, which enhances the oxygen-carrying capabilities of blood through a subsequent increase in red blood cell production and hemoglobin concentration. This adaptation results in a greater tolerance for the reduced oxygen intake experienced at high altitudes.

Hypoxic sleep is also beneficial for increasing aerobic performance through a Live High, Train Low (LHTL) routine. This involves sleeping at altitude during the night to achieve the associated blood benefits, then performing active daytime workouts at low altitude in order to maintain maximum exercise intensity.

Live High, Train High



THE BENEFITS

Decades of scientific research have shown the following physiological benefits to occur as a result of sleeping at altitude:

- Increased erythropoietin (EPO) production 3, 30, 31
- Increased red blood cell (RBC) mass and production 3, 32, 42, 45
- Increased hemoglobin concentration 3, 8, 33
- Reduced symptoms of acute mountain sickness (AMS) 58-64
- Improved physical performance at altitude 1, 64, 66
- Increased sea-level aerobic performance 1, 14, 30



3. ALTERNATING ALTITUDE

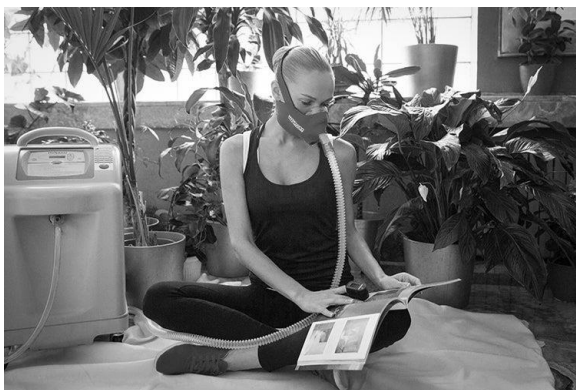
THE BENEFITS

Alternating altitude delivers an acute hypoxic stimulus in order to perform altitude training and trigger beneficial reactions while at rest. While this method is most often used in medical treatments, therapies, and breath training, it is also beneficial for mountaineers and athletes, as it will supplement the pre-acclimatization effort



Alternating altitude delivers an acute hypoxic stimulus in order to perform altitude training and trigger beneficial reactions while at rest. While this method is most often used in medical treatments, therapies, and breath training, it is also beneficial for mountaineers and athletes, as it will supplement the acclimatization effort of sleeping at altitude and assist in rehabilitating injured athletes who cannot yet exercise.

UP AND DOWN



IHE is simply performed with an altitude generator connected to an altitude training mask. This makes it easy to rapidly adjust simulated altitude and conveniently cycle between mask on and off while sitting comfortably.

HOW TO ALTERNATE ALTITUDE

WHO & WHAT IT'S FOR

Alternating altitude is beneficial to a wide range of people and applications. The most common include:

SPINAL CORD INJURY, HEART DISEASE, ASTHMA, DIABETES, MOUNTAINEERS, REHABILITATION.

WHO & WHAT IT'S FOR

Alternating altitude is beneficial to a wide range of people and applications. The most common include:

SPINAL CORD INJURY ^

Alternating altitude has shown excellent results as a therapy for improving mobility in patients with incomplete spinal cord injuries.

Research has shown that exposure to acute intermittent hypoxic exposures for as little as 30 minutes can improve torque, strength, and other functional outcomes.

HEART DISEASE ^

IHE represents a promising non-pharmacologic modality in the prevention and treatment of cardiovascular diseases.

Studies conducted on the subject have shown reduced blood pressure, reduced cardiac arrhythmias, increased aerobic capacity, reduced hypertension, and weight loss.

ASTHMA ^

Studies have shown that a proper IHT/IHE program can successfully minimize the symptoms of asthma and the occurrence of severe asthmatic episodes. Through its enhancement of mitochondrial (cellular) tolerance to oxidative stress via increased anti-oxidative enzymes, hypoxic therapy can alleviate asthmatic stress, which is largely a result of compromised anti-oxidative defense.

DIABETES ^

IHE has been shown to control blood glucose levels, increase fat burning, decrease blood pressure, decrease average heart rate, and reduce the probability of disease-related health complications like renal failure.

MOUNTAINEERS ^

For mountaineers, IHE is an excellent supplement to sleeping and exercising at altitude because it allows them to experience and become accustomed to the extreme altitudes they'll encounter on the mountain.

REHABILITATION ^

IHE provides the ability to achieve a cardiovascular workout while at rest, which is highly beneficial for those with reduced mobility due to injuries or other health conditions.

TRAINING GUIDELINES

The following guidelines are useful for getting started with a alternating altitude protocol:

1 CHOOSING SIMULATED ALTITUDE

Because the hypoxic doses are short, IHE should be performed at a very high altitude of 18,000 to 21,000 feet.

2 MASK ON

The mask should be held against the face for 3-5 minutes to achieve an acute hypoxic state.

3 MASK OFF

The mask should be removed from the face for the same duration that it was on in order to breathe oxygen-rich ambient air.

4 SESSION LENGTH

Steps 2 and 3 should be repeated 6 times each for a total session length of 18-30 minutes.

5 BLOOD OXYGEN SATURATION (SPO₂)

A fingertip pulse oximeter should be worn during each session and SpO₂ kept above the 80%. Any discomfort can be managed with shorter intervals or a lower altitude.

6 SESSION FREQUENCY

Sessions can be performed once daily between 5 and 7 days per week.

ALTITUDE TRAINING APPLICATIONS



ATHLETIC PERFORMANCE

Altitude training enhances both aerobic and anaerobic performance, leading to increased speed, power and faster recovery time.

Altitude training improves physical performance at sea-level and at altitude by enhancing muscle function and increasing the transport and uptake of oxygen by the body. Through sleeping, exercising, and/or intermittent breathing, individuals and teams can naturally increase endurance, speed, power, and recovery.

Athletes in every sport are now realizing the performance benefits that altitude training can have on strength, power and endurance. Through a combination of sleeping in normobaric hypoxia every night and moderately working out at altitude 2-3 times per week, athletes can increase performance to otherwise unachievable levels. Scientific studies have shown improvements in VO2 Max and Lactate Threshold by as much as 10%.

The proper altitude training program can substantially boost body's oxygen transport systems through enhanced ventilation, naturally increased EPO production and increased mitochondrial efficiency. This will allow more efficient energy production both aerobically as well as anaerobically. Ultimately this will allow the athlete to experience:

- Increased endurance and speed
- Less Fatigue
- Improved recovery



ACCLIMATIZATION

Altitude training allows mountaineers to ascend faster and helps anyone traveling to high altitudes reduce the symptoms of altitude sickness.

ALTITUDE TRAINING FOR PRE-ACCLIMATIZATION

“Hypoxic pre-conditioning provides protection from acute and otherwise lethal hypoxia (Everest is close to lethal at $pO_2=30\text{mmHg}$) by preserving vital organs and reducing the formation and severity of pulmonary and cerebral edema.”

Thousands of people each year ascend to altitude, whether it be for a mountaineering expedition or just a leisurely ski vacation. Individuals spend a great deal of time and money on such trips. Mountaineers must spend weeks at base camp acclimatizing to the harsh hypobaric and hypoxic conditions they will face in their trek to the summit. Even with this investment of time, and regardless of one’s physical condition, the risk of Acute Mountain Sickness (AMS) or other factors preventing a successful ascent or ruining a vacation is always present.

HYPOXICO TRAINING FOR ACUTE MOUNTAIN SICKNESS

A person’s reaction to high altitude is heavily dependent on genetics. Certain people are predisposed to acquiring AMS more severely than others. However, studies show that 80% of people ascending to altitudes of 13000ft/4000m or higher will suffer the debilitating symptoms of AMS (headache, nausea, insomnia) to some extent. This risk cannot be completely eliminated, but it can be predicted, controlled and significantly reduced in a cost effective and timely manner.

By sleeping at progressively higher levels of normobaric hypoxia and exercising in hypoxia at home before leaving for an expedition, mountaineers can pre-acclimatize and prepare themselves for exposure to extreme altitudes. Similarly, tourists and vacationers that live at sea level can ensure an enjoyable vacation by pre-acclimatizing in their home with a simple IHT program starting 4 weeks beforehand.

Through the stimulation of EPO production and other physiological effects previously listed, users can expect the following benefits as a result of such a pre-acclimatization program:

Reduced symptoms of Acute Mountain Sickness
Money saved by minimizing time spent acclimatizing on site
Increased probability of a successful summit attempt
Improved power and endurance
Diminished fatigue
Decreased recovery time after aerobic and anaerobic efforts.

HYPOXICO TRAINING FOR RAPID ASCENT MOUNTAINEERING

In the last few years, Hypoxico technology has been instrumental in revolutionizing the sport of high-altitude mountaineering. We've partnered with world-class commercial guiding operation, Alpenglow Expeditions, to help clients achieve "Rapid Ascents" of some of the world's most iconic peaks.

Alpenglow clients receive Hypoxico altitude training packages to pre-acclimatize from home prior to traveling to their climbing destination. The results have been quite successful, and the benefit of accelerated climbs are far-reaching. First, the client doesn't have to make as much of a time investment in the trip. Because much of the acclimatization is achieved at home, most itineraries can be cut 40-50%. This means that a typical 70-day itinerary on Mt. Everest can be cut to 35-40 days. In addition, using Hypoxico equipment will increase the likelihood of success on your climb and, most importantly, significantly improve safety.

For a real-world example of Rapid Ascent success, read this [Men's Journal](#) article on how Adrian Ballinger and Emily Harrington smashed the speed record on 27,000' Cho Oyo – the world's 6th highest peak. Adrian and Emily accomplished the climb in just 9 days – a feat that takes most climbers two months or more.



HEALTH & WELLNESS

Altitude training decreases resting heart rate and blood pressure, increases metabolism, and provides a number of wellness and therapeutic benefits.

For decades, doctors and epidemiologists have recognized the undeniable fact that permanent residents of high altitudes have decreased occurrences of many very common chronic diseases. Most of the longest living civilizations in the world live at elevations of greater than 10,000ft/3050m. This relationship between altitude and health is not a coincidence, and researchers have begun to uncover the science behind the mystery.

The combination of all the positive physiological reactions associated with hypoxic training provides both your mind and body with feelings of intense rejuvenation. Each session will revitalize you, leaving you feeling energetic and contented for the rest of the day. Hypoxico offers a wide variety of products designed to maximize the benefits of health and wellness, customized to fit your schedule and lifestyle.

HYPOXIA FOR HEART DISEASE

ALTITUDE TRAINING AND WEIGHT LOSS

A 2013 study found that Americans who live at sea-level are 4 to 5 time more likely to be obese as those who live in high-altitude communities. These results remained constant, even after controlling for other factors like exercise level, socioeconomic status, and family history. In addition, Colorado is “the leanest state” in America and the only state with obesity rates below 20%. These statistics are not a coincidence but are instead a result of the increased energy expenditure required to adapt to the thin air environment.

More energy expenditure = Faster metabolic rate and more calories burned!

The same study also showed that altitude affects the way we experience hunger and satiety (feeling of fullness). The results showed that people exposed to altitude feel less hungry because levels of leptin (the satiety hormone) surge in the body, while ghrelin (the hunger hormone) remain unchanged. This remained the case even after intense exercise. So, to be clear, the subject's metabolic rates spiked, meaning they burned more calories, but they also felt less hungry after the exercise session. This is the perfect combination for accelerated weight loss.

HYPOXIA FOR ASTHMA PATIENTS

Bronchial Asthma is a chronic respiratory disease for which the cause is largely unknown. Scientists believe that the tendency for development of asthma is hereditary, and those asthmatic episodes are strongly linked to the immune system's response to certain allergens. As there is not a consensus on the cause of Asthma, there is no cure. There are, however, treatments and ways to control symptoms of this chronic disease.

Scientists understand that chronic bronchial inflammation in asthma patients is a result of hyperventilation and lower than normal blood CO₂ levels. Therefore, the key to a successful treatment is the reduction of hyperventilation and improved oxygen utilization.

The idea of using hypoxic therapy for treatment of Bronchial Asthma has been studied in Russia for years and has recently made its way to the western hemisphere. Studies have shown that a proper IHT program can successfully minimize the symptoms of asthma and the occurrence of severe asthmatic episodes. Through its enhancement of mitochondrial (and thus cellular) tolerance to oxidative stress via increased antioxidative enzymes, hypoxic therapy can alleviate asthmatic stress, which is largely a result of the compromised antioxidative defense.

In addition, through improvement of cardiovascular/respiratory fitness, hypoxic therapy serves to reduce hyperventilation and hypocapnia (low CO₂ levels in the blood). In turn, the desired balance of CO₂ and O₂ in the blood is maintained, and the severity of asthmatic episodes and chronic bronchial inflammation is reduced.

This complementary treatment for asthma provides significant benefits over conventional symptomatic treatments. Patients can avoid negative side effects of Corticosteroids (inhalers) such as increased blood pressure, osteoporosis, and weight gain. Also, by preventing asthmatic episodes before they occur, patients can minimize chronic lung damage. Through a proper IHT program, bronchial asthma patients can expect the following benefits:

Reduction of asthmatic episodes and chronic bronchial inflammation

Positively influenced immunological status

Bolstered enzymatic anti-oxidative defense.

Increased Forced Vital Capacity (FVC)

Increased Forced Expiratory Velocity (FEV)

HYPOXIA FOR SPINAL CORD INJURY

Hypoxico continues to work with Dr. Randy Trumbower and his team at Emory University to develop new and progressive interventions to address incomplete spinal cord injuries. The results of various studies have been very promising, showing significantly improved walking speed and endurance in patients.

“What was really dramatic in the exercise protocol was that just a single week of breathing with intermittent hypoxia and walking had an effect size that was comparable to, if not in many cases greater than, that shown in previous studies of locomotor training for 4 to 6 weeks.” – Dr. Randy Trumbower, Emory University

Hypoxico is honored to support people like Dr. Trumbower in their research. We are convinced the medical and rehabilitative application of hypoxia is only just beginning.



RESEARCH

Many college and university research facilities have used Hypoxico systems in a variety of tests concerning the impact of altitude on human physiology.

At Hypoxico Inc, our systems and technologies are currently utilized in several fields of research. Hypoxico equipment delivers highly controlled low-oxygen or high-oxygen air and can be used for a variety of research applications. These hypoxic and hyperoxic systems deliver O₂ levels as low as 5% and as high as 30% and come with a variety of control, data-log, and scheduling options.

Both our personal-use line of equipment and the K2-Series commercial-grade- system can be utilized for research on human or animal subjects. The K2-Series offers the degree of oxygen control and high-flow rates often required for scientific research offering the most accurate and stable hypoxic air-flow of within .1% accuracy.

Many college and university research facilities have used Hypoxico systems in a variety of tests concerning the impact of altitude on human physiology. For instance, the University of Northern Michigan has used our products to study the physical parameters of performance-related increases in a subject's lactate threshold.

INTERMITTENT HYPOXIC THERAPY WITH SPINAL CORD INJURY PATIENTS

Emory University researchers are using high altitude training (low-oxygen equipment by Hypoxico) to stimulate nerve regeneration and rehabilitate Spinal Cord Injury Patients (SCI)

Hypoxico systems are also safe for animal testing and have been used by the University of Denver to study how altitude affects the breeding patterns of cows. Many private pharmaceutical companies have also used our products to test various implications of altitude upon the physiology of mice.

UNIVERSITIES/RESEARCH INSTITUTES

Harvard University, Beth Israel Deaconness Medical Center, USA

Dutch Olympic Committee

Deutsche Sporthochschule Köln, Germany

South Australian Sports institute

Einstein – Monte Fiore Medical Center, USA

Emory University

Johns Hopkins University, USA

Kent State University, USA

Louisiana State University (LSU), USA

Osaka City University, Japan

San Diego State University, USA

Syracuse University, USA

Texas Christian University, USA

University of Calgary, Canada

University of Glamorgan, UK

University of Innsbruck, Austria

University of Miami, USA

University of Minnesota, USA

University of Missouri, USA

University of Scranton, USA

Universität Tübingen, Germany



MILITARY & GOVERNMENT

Hypoxico systems have been used by the highest levels of American and global military groups to train for performance and survival in high altitude settings.

Since WWII, military equipment has been revolutionized by modern technology. Nearly every weapons system has undergone upgrades, except for the most important one – the human machine! Now, Hypoxico technology can upgrade the entire oxygen utilization system in each soldier, allowing for peak performance and turning them into high caliber Warrior Athletes! We do this by simulating a high-altitude environment at sea level, using our state-of-the-art products and technologies.

HYPOXICO MILITARY GOVERNMENT ALTITUDE TRAINING

Hypoxico systems have been used by the highest levels of American and global military groups to train for high performance and survival in high altitude settings. Our technology helps to minimize the rate of altitude sickness among soldiers stationed in high altitudes around the world, and our systems can be tailored for use with large groups in huge spaces like an army barracks, to small

spaces inhabited by the individual tactical warrior. Currently, there are a growing number of Hypoxico systems in use by the United States Military, including numerous US Special Operations groups.

Our equipment is trusted by all branches of the United States military and was even used by Navy SEAL Team 6 prior to their 2011 assault on Osama Bin Laden's compound in Pakistan.

HYPOXICO IS A REGISTERED DEPARTMENT OF DEFENSE SUPPLIER

Currently, there are a growing number of Hypoxico systems in use by the United States Military, including numerous US Special Operations groups. Hypoxico systems are also aviation applicable, as they are ideal for simulating the effects of high-altitude flight upon the body in a safe, controlled setting.

HYPOXICO FOR FLIGHT SIMULATION

Hypoxico systems are also aviation applicable and are ideal for simulating the effects of high-altitude flight upon the body in a safe, controlled setting. We've installed hundreds of custom hypoxic chambers capable of reaching altitudes up to 40,000' (12,000 meters). By conducting active and passive sessions of Intermittent Hypoxic Training, pilots are able to build resistance to hypoxia and prepare for sudden losses of air pressure inside the cockpit. In addition, our systems are significantly less expensive than the hypobaric alternatives that often leave soldiers suffering the debilitating effects of decompression syndrome.

Using normobaric hypoxia and strategic training protocols, Hypoxico has enhanced the safety of our heroic armed service members while producing a significant and measurable advantage over the enemy.

MILITARY BENEFITS OF HYPOXIC TRAINING

Pre-Acclimate before deployment to mountainous regions (like Afghanistan) to prevent the onset of debilitating Acute Mountain Sickness (AMS)

Carry out mountainous operations with a tactical advantage over the enemy – even altitude natives

5% performance enhancement at sea-level could mean the difference between life and death

Greatly increased lung capacity for amphibious warriors

Drill high altitude paratroopers in hypoxia

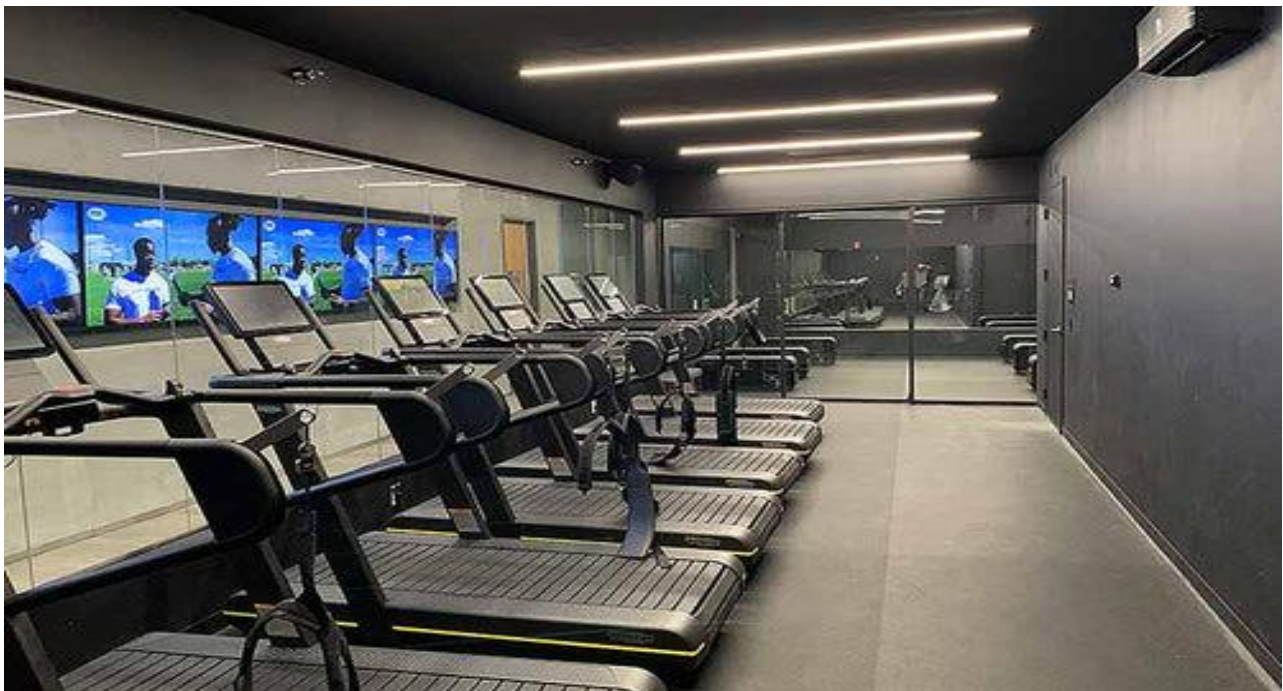
Prepare pilots in hypoxic flight simulators to simulate depressurization or oxygen supply failure.

No more hypobaric chambers



TRAINING FACILITIES

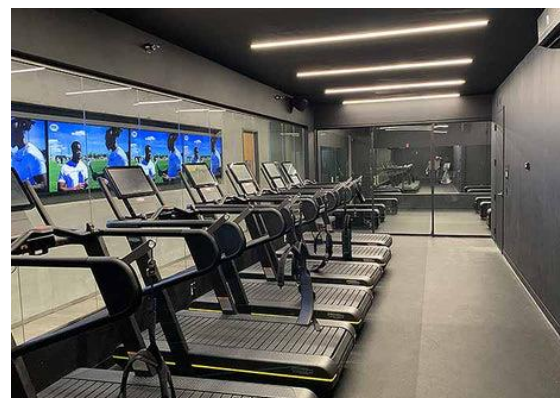
Altitude Training is known for decades as the best way to preparing for competition in sports, boosting performance and immunity and extending life.



The Simulated Altitude Training concept in enclosed environments was developed and patented in 1995 by Hypoxico Inc. in New York, U.S.A. Since then, many Olympic organizations, sports and football clubs, as well as private fitness clubs adopted this advanced training concept and have installed such systems for their athletes in altitude centers, altitude hotels and altitude chambers with full climate simulation.

Most of such installations were provided worldwide by Hypoxico Group with its main offices and manufacturing facilities located in the U.S.A. and Europe.

Hypoxico is the only world recognized supplier of absolutely safe altitude training systems providing simulated altitude environments for installations from single chambers to altitude centers and hotels with up to 50 bedrooms, swimming pools and altitude centers for up to 100 users at a time.



PROJECT OVERVIEW

Thank you for presenting Hypoxico with this opportunity. The following document explains how the HYP systems are the perfect solutions to meet the criteria of this project. You will have the ability to use the machines for the pre-built altitude chamber as well as independently with the maks systems.

The HYP comes standard with an elevation max of 13,000 ft. / 3962m (12.8% O₂) but will be modified to reach 9% O₂. These energy conscience units are easily installed and ready for use immediately. The HYP Control Panel will monitor and control the desired elevation to within just a few feet or meters of your set-point. The integrated sensor displays O₂, Co₂, temperature, and humidity.

HYP-123 ALTITUDE SYSTEMS

- Tough Metal Shell & Upgraded Components
- Standard HYP's Have Built In Control Panel
- Remote Control Panel Available On Request
- **Airflow:** 100-120 Liters Per Minute
- **Typical Heat Rejected Per Unit:** 750 BTU/HR
- **Standard Altitude:** 12,500ft / 3800m
- **With High Altitude Adapter:** 21,000ft / 6400m
- **Airflow With High Altitude Adapter:** 50/60 L/min
- **Standard Warranty:** 1 Year / 2,500 Hours
- **Extended Warranty (\$300):** 3 Years / 8,000 Hours
- Available With Recirculating Function
- Engineered & Manufactured In USA



Technical Specifications

- ✓ Upgraded components for commercial usage
- ✓ Tough metal shell for better protection
- ✓ Additional cooling fan for increased longevity
- ✓ Works with altitude tents, altitude workout systems
- ✓ Works with IHE/Wellness Systems
- ✓ Preferred solution for medical professionals

Size	21 5/8"(H) x 10 5/8"(W) x 23"(D) 55cm (H) x 27cm (W) x 59cm (D)
Weight	78lbs / 36kg
Shipping Weight	80lbs / 37kg

COMPONENTS & DESCRIPTIONS

Touch Screen & Control Panel

The Hypoxico touch screen control panel allows a user to easily make adjustments to the K2 System. With a touch of a finger you can change system features like, schedule system start up and shut down, adjust simulated altitudes, monitor altitude and elevation levels (O2 Levels), smart phone remote control & viewing capabilities, maintenance tracking and safety features. The Hypoxico control panel is accessible only by credentialed users to allow designated users to change or control the system. This ensures that no unauthorized users are able to turn the system on/off or change altitude/oxygen set points.



Oxygen Sensor

The Hypoxico oxygen monitor is an all in one sensor in a small enclosure with MODBUS interface.

- Temperature measurement
- Relative humidity measurement
- Pressure measurement
- Oxygen measurement
- CO2 measurement
- Absolute humidity (calculated)
- Dew point (calculated)
- Relay output (alarm functions, safety chain)
- Buzzer output (alarm functions)
- RS485 MODBUS interface
- Graphic display with variable Backlight
- Easy mountable enclosure



Hypoxico Custom Chamber

Hypoxico custom altitude chambers can be made to meet any sizing solution to meet your goals. Doors can be oversized to fit any logistical requirements. Chamber heights can be adjusted to meet any challenge. We offer a wide range of materials and sizes to meet any goal. Consult your Hypoxico representative and view the quote page for specifics on the custom altitude chamber for your project.



HYP-123 ALTITUDE SYSTEMS – INSTALLATIONS



HYP-123 ALTITUDE SYSTEMS – INSTALLATIONS



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HYPOXICO ALTITUDE TO OXYGEN CHART

Altitude (Feet)	Altitude (Meters)	O2 Monitor Reading	Effective Oxygen Percentage	Similar Location
Sea Level	Sea Level	20.90%	20.90%	Hypoxico HQ - New York, NY
1,000'	304m	20.10%	20.10%	Tbilisi, Georgia (1,479' - 451m)
2,000'	609m	19.40%	19.40%	Canberra, Australia (1,984' - 605m)
3,000'	914m	18.60%	18.60%	Chamonix, France (3,264' - 995m)
4,000'	1219m	17.90%	17.90%	Salt Lake City, UT (4,226' - 1288m)
5,000'	1524m	17.30%	17.30%	Boulder, CO (5,430' - 1655m)
6,000'	1828m	16.60%	16.60%	Stanley, ID (6,253' - 1906m)
7,000'	2133m	16%	16%	Flagstaff, AZ (6,910' - 2106m)
8,000'	2438m	15.40%	15.40%	Aspen, CO (7,907' - 2410m)
9,000'	2743m	14.80%	14.80%	Bogata, Columbia (8,660' - 2640m)
10,000'	3048m	14.30%	14.30%	Leadville, CO (10,200' - 3109m)
11,000'	3352m	13.70%	13.70%	Cusco, Peru (11,152' - 3399m)
12,000'	3657m	13.20%	13.20%	La Paz, Bolivia (11,942' - 3640m)
13,000'	3962m	12.70%	12.70%	Yabuk Camp, Sikkim, India (12,467' - 3800m)
14,000'	4267m	12.30%	12.30%	Pikes Peak, CO (14,115' - 4302m)
15,000'	4572m	11.80%	11.80%	Mount Rainier, WA (14,411' - 4392m)
16,000'	4876m	11.40%	11.40%	Mount Blanc (15,777' - 4808m)
17,000'	5181m	11%	11%	Everest Base Camp (16,900 ft. - 5150m)
18,000'	5486m	10.50%	10.50%	Mount Elbrus (18,510' - 5642m)
19,000'	5791m	10.10%	10.10%	Mt. Kilimanjaro (19,341' - 5895m)
20,000'	6096m	9.70%	9.70%	Mt. Denali (20,310' - 6190m)
21,000'	6400m	9.40%	9.40%	Hypoxico Home Generator Max
22,000'	6705m	9%	9%	Ama Dablam (22,349' - 6812m)
23,000'	7010m	8.70%	8.70%	Aconcagua (22,841' - 6960m)
24,000'	7315m	8.40%	8.40%	K12, Pakistan (24,370' - 7428m)
25,000'	7620m	8.10%	8.10%	Chomo Lonzo, Himalayas (25,604' - 7804m)
26,000'	7924m	7.80%	7.80%	Annapurna (26,545' - 8091m)
27,000'	8229m	7.50%	7.50%	Cho Oyu (26,864 ft. - 8188m)
28,000'	8534m	7.20%	7.20%	K2 (28,251 ft. - 8611m)
29,000'	8839m	6.90%	6.90%	Mt. Everest (29,029 ft. - 8848m)
30,000'	9144m	6.30%	6.30%	Hypoxico K2 High Flow Max



THANK YOU FOR YOUR INTEREST IN HYPOXICO

If you have any questions, please don't hesitate to contact me directly.

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We are here to help take your training to the next level.

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