Four men court controversy with audacious plan to scale Everest in one week

The use of xenon gas may help cut the usual trip from weeks to days. But not all members of the climbing community approve of the potentially speedy climb.

47 minutes ago



By Cindy Boren

The itinerary is simple. Four British men will hop on a plane Friday in London, fly roughly 4,600 miles to Kathmandu in Nepal and then board a helicopter to Mount Everest's base camp. From there, they'll climb to an altitude of more than 29,000 feet, to the top of the world. Hundreds of people do it every year, but these military veterans hope to complete the trip, door to door, in a record seven days.

What's different about this particular expedition, besides its one-week goal, is that the group is using xenon gas, which some scientists believe could boost red blood cell production and help speed altitude acclimatization, as part of its preparation, a decision that has captured the attention of the climbing community.

"The clock starts when we leave Heathrow," Al Carns, a British lawmaker and minister for Veterans and People at the Ministry of Defense who is making his first Everest trip, said Monday from London. "And it stops when we arrive back. We think probably a day of travel, then three days to go up, two days down and the last travel day."

Everest typically requires weeks of altitude acclimatization before climbers can attempt a trek that becomes increasingly dangerous as it enters the "death zone" above roughly 26,200 feet, where there is insufficient oxygen to sustain life. Exposed to such harsh conditions, individuals can become acutely hypoxic, with brain function severely impaired. To push past that, Carns and his fellow climbers, Garth Miller, Kevin Godlington and Anthony "Staz" Stazicker, have been training for their mission, which is doubling as a fundraiser for fellow veterans, for months.



(The Washington Post)

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"It's all about sort of taking that Special Forces ethos and putting it into this mission, which is lots of little bits of innovation technology training to reduce the chances of failure," Carns said, "and increase the chance of success and to mitigate the risk."

Since the first of the year, the four have slept in home hypoxic tents that gradually lower their oxygen levels, simulating high altitudes. "We've all accumulated probably in excess of 500 hours in the hypoxic tent now and that's usually sleeping in the evening and then doing exercise with a mask on as well," Carns said.

The three other men in Carns's group — a pilot, a businessman and an entrepreneur — have found the preparation to be deeply unpleasant. "It disrupts your sleep," Carns said. "You don't get any deep sleep, you wake up short of breath every couple of hours, so it's pretty miserable actually and it's accumulative as well. It all adds up — I can't wait to get rid of it."

Here, innovation meets ambition. Lukas Furtenbach, an experienced mountaineer whose company, Furtenbach Adventures, in 2017 shortened Everest trips to weeks with "flash" expeditions that used hypoxic tents, approached the four with the idea of slashing the Everest time frame with the use of xenon, a strategy that has both roiled and fascinated the climbing community.

Under light sedation and medical supervision, the four inhaled what was described by the originator of the process as a "sub-anesthetic concentration" of xenon gas, mixed with oxygen in a single administration lasting "less than an hour," according to Michael Fries, the physician who developed the protocol. The strongest effect is likely to come 10 to 14 days after administration, with its effects lasting another 10 to 14 days. The four received the treatment May 5, putting the ideal departure date for the Everest mission at Friday.

Furtenbach calls a seven-day Everest climb "a longtime dream of mine," and touts the quick turnaround's safety advantage because of fewer up-and-down preparatory climbs required to traditionally acclimatize to altitude, as well as a lessened ecological impact on the mountain. The cost of the expedition is around \$170,000.



Profil ansehen





Mehr auf Instagram ansehen









Gefällt 1.392 Mal

therealgarthmiller

#MissionEverest

Climbing Everest in 7 days 'door to door' from London, redefining what's possible in high-altitude mountaineering.

We are on a mission to raise £1m for veterans and armed forces charities.

Check out our story in The Sun today and scan the QR code or click the link in my bio to visit our GiveWheel charity fundraising site.





Simon Jones (The Sun Newspaper)

#Speed #innovation #sustainability

#charity #everest7days #nepal #veterans #armedforces #britisharmy #royalmarines #uksf #mountaineering #sherpa #everest #sagarmatha #8000m #deathzone #climateneutral @furtenbachadventures

Alle 30 Kommentare ansehen

Kommentieren ...



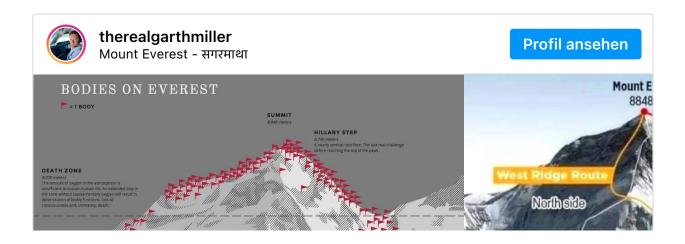
Furtenbach, who is on the mountain this month but won't be leading his company's expedition because of recent knee surgery, admits the plan is "a provocation." Adrian Ballinger, a climber who has led expeditions on Everest and other peaks since 2004 through his Alpenglow Expeditions company and pioneered a rapid ascent program of his own, said that he sees the xenon experiment "as a stunt more than anything else. ... It is a banned substance by all professional sporting organizations and even though [mountain climbing] is not managed by a sporting organization, it's always been a goal of climbers to follow best practices of not doping. All that combined makes it feel, I guess, pretty icky. People should be able to climb how they want to, but it isn't mountain climbing, it's mountain tourism."

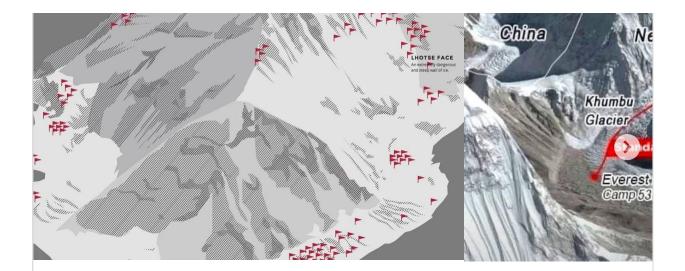
Said Carns: "One thing a lot of people are saying, you know, this could be a shortcut. This is not a shortcut in any way, shape or form. It's probably even more training than you would do if you're doing it normally."

Why xenon?

Xenon is a noble gas discovered in the 1880s that for decades was used as an anesthetic. It's been shown to increase <u>production of the protein erythropoietin</u> (EPO), which is produced by the kidneys in response to low oxygen levels. EPO fights hypoxia by increasing the number of red blood cells and hemoglobin, which carries oxygen throughout the body. At high altitudes, this can be stimulated by making multiple, time-consuming trips up and down a mountain.

Limited studies and anecdotal observations by Furtenbach have indicated that xenon could be beneficial at high altitudes, particularly in Everest's "death zone." That's where, as Miller wrote on Instagram, "the body rapidly begins to shut down. Decision-making is grossly impaired and normal bodily functions deteriorate. ... Supplemental oxygen can mitigate some of these risks to an extent, but you are still on borrowed time."





Mehr auf Instagram ansehen



Gefällt 61 Mal

therealgarthmiller

#MissionEverest

Over the last couple of days I've been taking you along on a virtual climb of Everest.

Base Camp > Camp 1

Camp 1 > Camp 2

Camp 2 > Camp 3

Camp 3 > Camp 4

Before we set out for the summit let's take a moment to reflect on the extreme danger and risk Everest climbers must face.

The Khumbu Icefall is infamous and known for being a section of the climb that regularly sees fatal accidents.

But it isn't the deadliest part of the mountain.

Most deaths occur in the #DeathZone - the part of the mountain above 8000m

where there is insufficient oxygen to sustain numan life.

In the Death Zone your body rapidly begins to shut down. Decision making is grossly impaired. Normal bodily functions deteriorate, followed by a loss of consciousness before, ultimately, death occurs.

Supplemental oxygen can mitigate some of these risks to an extent, but you are still on borrowed time.

There have been approximately 350 deaths on Everest. Most have occurred in the

Follow along as tomorrow we will look at the route to the summit.

#FortuneFavoursTheBrave

Death Zone above Camp 4.

#everest7days #everest #charity #nepal #sherpa #himalayas #8000 #8848 #challenge #adventure #chatity #pushingboundaries #deathzone

Alle Kommentare ansehen

Kommentieren ...



The idea to employ xenon came to Furtenbach from Fries, head of the department of anesthesiology and operative intensive care medicine at St. Vincenz Krankenhaus Limburg in Germany. While studying cardiac arrest and critical care in 2000, he began to research the neurological injuries that followed such cases. Working at Aachen's university hospital, which was researching xenon for its organ protection properties, "we discovered that it has profound tissue and organ protective effects, while it became clear that it is too expensive to be used in daily routine as an anesthesia gas."

A casual mountain climber who has reached heights of roughly 13,000 feet, Fries has a personal understanding of the physical toll of the sport on the body. The potential benefits of xenon clicked with him when he heard a radio interview in which Furtenbach described problems with his efforts to speed the acclimatization process through sleeping in hypoxic tents months before expeditions. He contacted Furtenbach, who warned him that xenon use might cause a "s---show" in the climbing community.









Mehr auf Instagram ansehen







Gefällt 263 Mal

alcarne

aivaiiis

Slept in the tent last night at 6000m. Decidedly average. I woke up every hour short of breath but every little bit of preparation helps and the tent should adjust our body to the altitude.

London to Everest and back again in 7 days (under 21 days is a success). 13 days to go until we leave.

Alle 14 Kommentare ansehen

Kommentieren ...



"I got this idea in my mind so why don't we try to do [acclimatization] with one single xenon administration?" Fries said. "... We, of course, wanted to really explore what's the effect on healthy individuals if you give low doses because usually in our daily business we are delivering xenon in very high concentrations [as an anesthetic]. But apparently, for the EPO production, you only need 30 percent."

Furtenbach tested the idea himself on climbs, including up Arconcagua, Argentina's 22,837-foot peak, in 2020. He summitted in a week with no preacclimatization and felt strong, thanks to what he said was an increase in his red blood cells and his oxygen saturation. He and two guides used xenon on Everest in 2022 and results were again positive, although he said the three also preacclimatized in their homes by sleeping in hypoxic tents.

"It's now 15 individuals that we treated with xenon and we followed them with some tracking of the oxygen saturation and of the hemoglobin levels and actually the values were very impressive so they had no problem with oxygenation," Fries said. "They had elevated hemoglobin levels. Besides that, they really report that they are feeling great. They're feeling very healthy, very strong. And none of them, none of those individuals exhibited symptoms of high altitude sickness."

The skeptics' case

The manipulation of blood and blood components is prohibited by the World Anti-Doping Agency, and although there is no governing body in mountain climbing, the International Climbing and Mountaineering Federation cautioned in a statement that "according to current literature, there is no evidence that breathing in xenon improves performance in the mountains, and inappropriate use can be dangerous. Although a single inhalation of xenon can measurably increase the release of erythropoietin, this increase is not sustained over four weeks' use, nor is it associated with any changes in red blood cells. According to the literature, the effects on performance are unclear and probably nonexistent."

Furtenbach, like Fries, said he is more interested in whether xenon can protect tissue than enhance performance. He faced the same backlash, he said, when the flash expeditions were launched.

"Back then, people said, there's no scientific research proving that hypoxic preacclimatization is really working, that it is safe. It was said to be doping and unfair and all these things that we hear now with xenon," he said. "Still, we think the less time you spend on the mountain, the safer the climb will be and in a dangerous environment like Mount Everest, this is very obvious."

Peter Hackett, a mountaineering expert and physician, pointed out that the few studies into the effect of xenon have been insufficient. "Does xenon increase red blood cells? Well, that's never really been shown conclusively," he said. "It does increase EPO transiently but in one study that was done in athletes it did not increase red blood cells and it did not increase their exercise performance. But that's one study done under certain circumstances and it needs to be studied again under varying circumstances."

Andrew Peacock, an honorary professor specializing in altitude medicine at the University of Glasgow, <u>told the BBC</u>, an "increase in erythropoietin does nothing on its own. The question in this case is, does it really stimulate production of red blood cells in such a short period?"

Fries would not divulge the full process involved for what he claimed were proprietary reasons, but described how, under light sedation, Carns and the other three were given a "sub-anesthetic concentration" of xenon in a single administration lasting "less than an hour." Carns said he isn't expecting a big boost from xenon, but hopes it will protect brain tissue from high altitude cerebral edema, the most dangerous form of altitude sickness.

"It won't be the deciding factor on this expedition, but it might provide us a percentage point increase at chance of success," he said.

Creating a legacy?

Alan Arnette, a climber who has been on 38 major expeditions and <u>provides definitive daily coverage</u> of Everest and mountain climbing on his blog, is watching closely, with a view of the sport that many share.

"Mountaineering is really about suffering," Arnette said. "... I just can't see flying over, helicoptering in, going to the summit and then rushing down so you can go back to work and I have all the respect in the world for Lukas. He's a real innovator and has done great things in the sport. He's very analytical and does his homework. I'm 100 percent confident that his team will be the best they can be and I hope they do it in a week, but I'm not a fan."

Furtenbach said he believes "the industry and the mountain are both big enough for a coexistence of different styles." The politician in Carns is well aware of the debate. "You have the supporters and the naysayers and then you sort of sit in between," he said. "When oxygen first came in, it was a no-no, then taking helicopters to base camp was a big no. I accept the reality is we're at a very cutting edge of innovation here."

Seven days is an aggressive goal, and Carns and his fellow climbers know that Everest's capricious weather as well as unforeseen physical problems among the men could mean what they see as a "mission" takes a little longer.

"The reality is we've got 21 days to do this. The record is at 21 from London back to London in 21 days, so I'm really confident. I reckon there's a 70 to 80 percent chance we'll do it in 21 days, a 30 percent chance we can do it in seven," Carns said. "If it means we need to go up to Camp 4 and then back to Camp 2 and then back up to the summit, then that's what we'll do. I'm pretty confident unless the weather gods properly come against us."

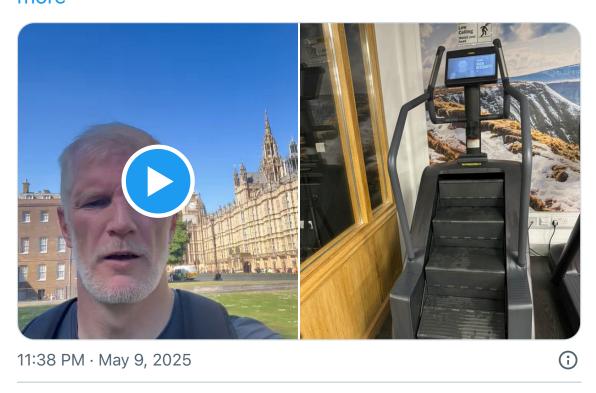




Mission Everest = London to the summit of Everest and back again in under 21 days.

We leave on the 15th of May so only 6 days to go. Just completed my last work out—-300 floors climbed in 60 minutes on the stepper=miserable.

All money raised goes to Veteran charities—-link Show more



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