

## Does oxygen cause lung cancer?

**The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis.**

Epidemiologists have long been puzzled by a strange pattern in their data: People living at higher altitudes appear less likely to get lung [cancer](#).

Associations like these can be notoriously misleading. Slice and dice the profusion of data, and there is no end to the coincidences that can arise.

But the evidence for an inverse relationship between lung cancer and elevation has been much harder to dismiss.

A paper published in the journal PeerJ plumbed the question to new depths and [arrived at an intriguing explanation](#). The higher you live, the thinner the air, so maybe oxygen is a cause of lung cancer.

This idea didn't appear out of the blue. A connection between lung cancer and altitude [was proposed as early as 1982](#). Five years later, other researchers suggested that oxygen might be the reason.

Skeptics were quick to strike back, though not very effectively. A [would-be debunking on the Cancer Research UK website](#) was quickly followed by [a debunking of the debunking](#).

All of the usual caveats apply. Studies like this, which compare whole populations, can be used only to suggest possibilities to be explored in future research. But the hypothesis is not as crazy as it may sound. Oxygen is what energizes the cells of our bodies. Like any fuel, it inevitably spews out waste — a corrosive exhaust of substances called “free radicals,” or “reactive oxygen species,” that can mutate DNA and nudge a cell closer to malignancy.

**Read full, original post:** [Unraveling the Ties of Altitude, Oxygen, and Lung Cancer](#)