A long, long time ago...
I can still remember
How that low oxygen used to make me smile.
At 9,000 feet was my chance,
To see those people in my head dance,
And, maybe, they'd do that for a while.

But 29,000 feet made me shiver
It was pretty cold come hither.
Barometric pressure was sea level times one third;
”Your inspired oxygen is now 43 mmHg” mumbled a passing bird.

When we hit 69,000 feet I cried
But when I did my tears just fried,
’Cause the pressure was only 47 torr and my blood boiled deep inside
The day I went too high.

My, my I went way too high.
My breathing got really heavy,
And then my arterial blood pH went up- oh my!
It felt like I was drinkin' too much whiskey and rye
The nausea, clumsiness, loss of visual acuity, thinking I could fly
All because I went too high…

Did you write the Book of Pulmonary Pathophysiology,
And do you have faith in John B. West’s methodology,
How he answered what I asked?
Do you believe in chemoreceptors that are peripheral,
They detect hypoxia – seriously, it’s not bull,
And then you just start breathing really fast!

Well, you raise your arterial partial pressure of oxygen in under a min
But your carbon dioxide levels get really thin...
Thus your hydrogen ion concentration gets way too low
You develop respiratory alkalosis, yet another no-no

Your kidneys try to excrete HCO_3^- like crazy
To bring your blood pH back to normal so you are happy as a daisy
Things aren't quite normal, but you go turn on MTV and watch Jay-Z
Whew! All because I went too high…

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Now for ten years I've been living up in Denver at 6,000 feet
When I first ran around, was I ever beat,
But that's only how it used to be.
In response to hypoxemia my kidneys released EPO,
My red blood cell count went up, although so did the viscosity of flow,
And I developed a ventricular hypertrophy,

Oh, at the same time there was a Bohr shift to the right,
I figured that out since I'm just so bright.
Because of an increase in 2,3 DPG,
That occurred in my RBC,

I could unload more oxygen at my tissues, mate!
I also noticed more often that I had to micturate,
Call it altitude diuresis, or maybe its just fate
All because I went too high…

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Altitude ain't the only thing to affect barometric pressure,
There's your location on earth, or even the weather.
So any of these things can change the level of oxygen you inspire,
But they aren't really ever going to make you tire,
Since the way to this is just to go higher and higher.

At 8,000 feet you can get Acute Mountain Sickness
And all this time I though it was just a lack of fitness!
After a recent gain in altitude you get a headache and one of the below,
Fatigue, insomnia, dizziness, nausea – lunch, out you go!
Some think this sickness is related to alkalosis,
But let's not spend too much time here, it's not even the grossest…

With high altitude cerebral edema,
It's like someone filled your head full with Zima,
Your brain swells after a recent ascent in elevation,
It's the effect of hypoxia on cerebral blood vessel dilation,
You become ataxic and lose your coordination,
Like grad students who get plastered on every possible occasion.

Last but not least there's Chronic Mountain Sickness where,
Long-term residents are affected and poorly they fare.
Mental activity decreases, as many are well aware,
You cannot think clearly, much like Donald Brashear.
RBC production increases due to hypoxic conditions,
And high blood viscosity comes into fruition.
It takes more work to pump blood with such a high hematocrit,
But like a fat kid on a Smartie, your heart is all over it.

Alas, the workload may become too great,
Your heart cannot handle the increased freight,
Ultimately cardiac failure occurs and you're done,
But not before we go through one last run:

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My breathing got really heavy,
And then my arterial blood pH went up- oh my!
It felt like I was drinkin' too much whiskey and rye
The nausea, clumsiness, loss of visual acuity, thinking I could fly
All because I went too high…

By:

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