

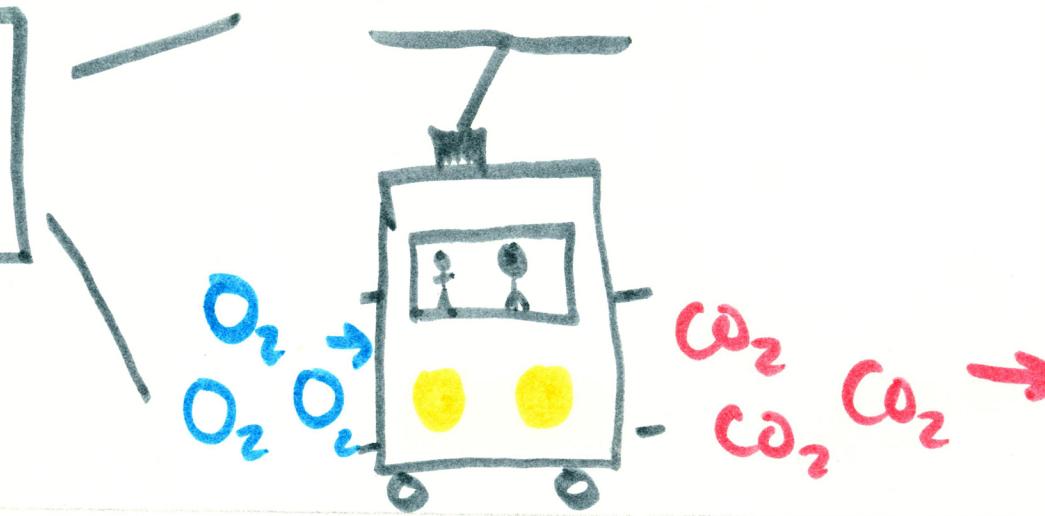
# CHRONIC BRONCHITIS

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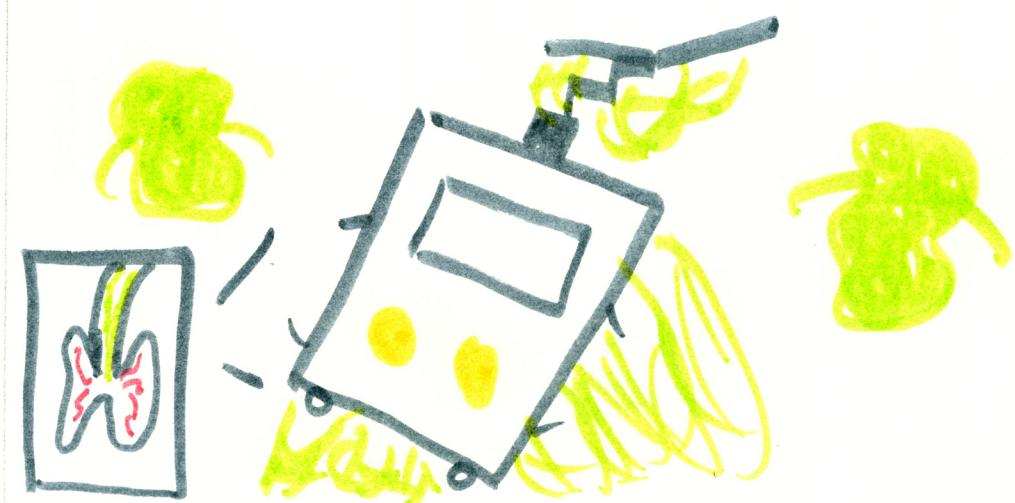
Rian is usually a really happy person! Look at her ride her bike! Her lungs and her respiratory system are healthy, properly exchanging O<sub>2</sub> and CO<sub>2</sub> with unclogged airways.



Let's look closely at her airways. There's a train! Look, it's happily chugging along. The O<sub>2</sub> is exiting the train into the bloodstream and the CO<sub>2</sub> is coming on.



Wait, what's this? Why is the train slowing down... OH NO!! Is that mucus?? Why are the tunnels so small?? What's going on? Let's zoom out.



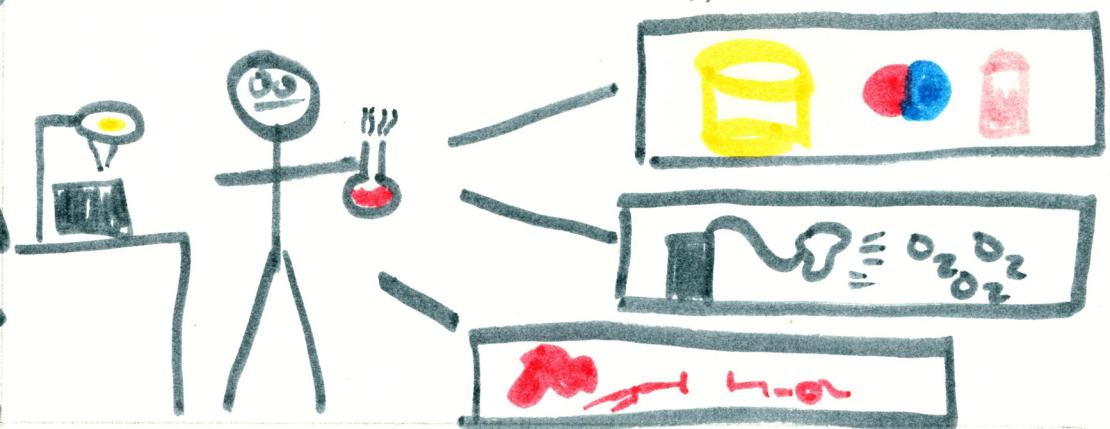
OH NO! Rian is sad. She is struggling to breathe and coughing. Her chest hurts too :( Oh no Rian, how did this happen?



cough cough... Hello... cough cough... I think I have chronic bronchitis... cough cough. It's because I live in the center of Chicago which has really bad air, I've gotten sick a lot recently, especially with respiratory illnesses, and I'm a heavy smoker. Help me?? I want some water and a nice nap.



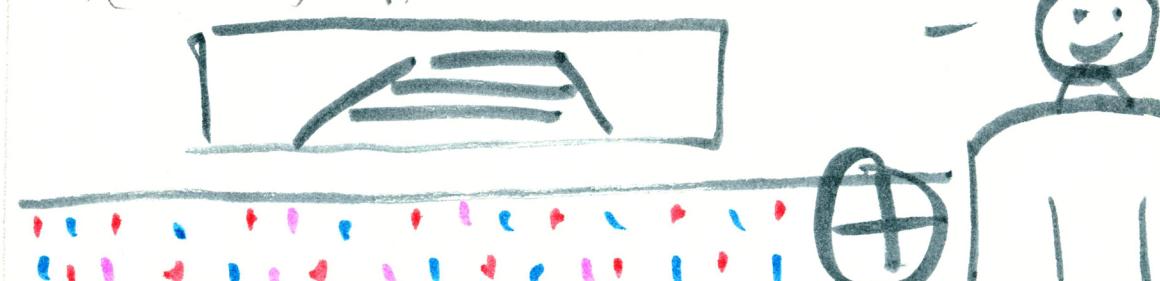
We can help you Rian!! Luckily, Acute Bronchitis is a well-researched disease so there are several treatments that can be used to help you feel better!! You can use drugs such as bronchodilators (airway opening drugs) and anti-inflammatory drugs (steroids) to cure chronic bronchitis. In serious cases, you must use oxygen therapy and lung transplants, but you're fine Rian! Here are some bronchodilators!!



Let's zoom in to see if Rian's respiratory system is doing better! OH look, the train's tracks are back to normal! No mucus or constriction in these pathways. Let's ask the conductor what happened.



The bronchodilator drug expanded the "funnels" and added tunnels of mucus. Now, the O<sub>2</sub> can exchange with the CO<sub>2</sub> in the bloodstream, which means that Rian will be better!! Now, she has to make sure not to get sick or smoke. She should probably wear a mask outside to limit pollutants in her respiratory system, or the train will stop again!!!



Rian is happy again! Look at her riding her bike! Don't do drugs & ds! And don't live in Chicago!

