

“Antibiotic Discovery”

By Tuador Wikina

For lack of a better word, my boyfriend, Perry, is *special*. He chews with his mouth open, forgets anything I tell him, misses his assignments, and my favorite one of all: cannot stay off his phone. However, for some odd reason, I can never get enough of him. Without him, I wouldn't have anyone to hear me rant about pharmacy prescription power, to brainlessly agree with my political stances, or to lie to me about how good I am of a cook.

You can imagine how hard it was for me to hear that Perry had fallen ill to food poisoning. *Was I really that bad of a cook?* For the love of salmonella, the heavens could have given me a break, or more so Perry a break, and just let the meal run its course normally.

Upon his arrival to the doctor's office, they informed us that the food poisoning is not as bad as we thought and he should have a speedy recovery. He was prescribed ampicillin and a couple days off; I was relieved.

Within two days, Perry was *feeling better*. His audacious and nonchalant nature had come back in full circle and I was glad to have Perry back.

Bang! The door flung open and Perry's brown-tone skin and Green soccer jersey was covered in sweat. He aggressively dropped his backpack by the doorway and crashed on the couch.

“How are you feeling, Perry?” I asked while holding my nose.

“Soccer game was fun, I know I did that,”

“Glad you had fun, but how is your stomach?”

“It's okay,” he replied looking for the remote control.

I headed towards the doorway to grab his backpack to bring it closer to him. I dragged the heavy bag as it felt like I was carrying a boulder.

“Here you go, babe” I said, throwing his backpack near his feet.

“Could you grab my phone out of my pocket?”

I sighed and began to ransack his backpack. I dug my hand through various papers, coins, candy wrappers, and random business cards to no avail. I checked another pocket and felt plastic. I pulled out the plastic and saw an orange vial with a prescription plastered around it.

I shook the bottle slightly and saw that three green pills still remained in the vial. I read the prescription:

Perry Daude

AMPICILLIN 500 MG

Take one tablet daily until completed.

“PERRY!” I screamed. He shot up from the couch with great speed. His brown eyes enlarged in terror, as he heard the syllables of his name.

“What is this? Why are there *still* pills in the bottle?” I questioned.

“I’m feeling better so I didn’t really feel the need to finish the prescription,” he bellowed as the fear reduced from his eyes. In no time, he resorted back to his comfort place.

“Perry, there’s literally an antibiotic crisis going on!” I exclaimed. Antibiotics are very powerful and used to treat bacterial infections. However, resistance to these antibiotics have been occurring which is making treating infections difficult.

“That’s just some bogus that media is making up, medicine always works,” Perry scoffed as he turned up the volume of the TV.

“No!” I yelled. My blood began to boil and my heart was beating fast. I snatched the remote from his sweaty hands and shut off the TV.

“Really, Penelope?” Perry sighed, rolling his eyes.

“Medicine doesn’t *always* work, Perry,” I lectured, “In fact you’re hurting your chances of survival when you do this”

“I’ll just take them if I feel sick again,”

“Perry, you could develop resistant bacteria,” I gulped, “You can’t just take them like cough drops! The resistant bacteria grow and become more difficult to treat!”

“Okay, then I get more until it dies,” Perry said as his tone became sharper. I’d never heard Perry raise his voice in my whole existence. However, the antibiotic crisis is very serious and Perry is not the only person in the world who doesn’t know about it.

“It’s not easy to just easy because medicine isn’t always gonna work” I explained, “They have things like ESKAPE pathogens which currently don’t have any antibiotic that works”

Perry gasped.

“It’s not only not taking your antibiotics full course that can cause resistance,” I whispered, “Resistance can arise in animal feed from antibiotics and the contaminated feed can decrease immunity in humans”

His face began to light up as he became engaged in the conversation. I noticed a spark that I had never seen him before. In all honesty, it was really weird to adjust to but I finally felt like I was getting through to him.

“Probably a reason to stop eating animals, eh?”

“Yeah”

“But why do they do that anyway, like why is it so strong?”

“Bacteria cells can alter their shape to discourage the antibiotic,” I answered, “Aside from being unaffected from the antibiotic, some bacteria can pump it out of the cell before it can even make a move”.

It seemed like all the knowledge that I was learning from university was paying off. Perry began to look worried as he saw the pills. I knew he was stressed because he felt like he made a mistake. Patients are supposed to take the full dose of prescription, never skip, don't save for later, or share their medication. This can become very dangerous because it provides inefficient treatment and more chances for harmful resistant bacteria to grow. It is not only patients that have to be careful but doctors too. Doctors have to make sure they are prescribing the right medications because taking an antibiotic that one doesn't need can also hurt them when they need it.

“So what are they gonna do about it? Seems like we are stuck”

“No, that's why in class we were trying to find more alternatives through soil”

“Like dirt?”

“No, it's not *dirt*, there are so many microbes in soil that can help us learn about antibiotics”

“That's actually cool,” Perry whispered.

“Say it again louder”

“It's actually interesting,” he blurted.

My eyes widened and a smile was plastered on my face. I couldn't help but be excited that Perry had finally listened to something I told him.

I realized that antibiotic resistance is not something to joke about and the amount of people who are not fully aware of the crisis is very common. However, it is important to continue raising awareness and working to find solutions, because every effort counts.