

## Superbug: The Anti-Antibiotic

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Light crept into Devin's eyes as the early sun rise of July began shining its way through the window. Today would be another early morning for him. Devin liked to hit the gym before he started his day.

"Devin! I made you breakfast! Come downstairs!"

His girlfriend, Lexie, always came over early to make him breakfast. She would leave with him to go to her job as a chef. She was an amazing cook. Devin goes downstairs, eats his pancake breakfast and drives to work with Lexie in the car.

Devin arrives at work after dropping his girlfriend at her restaurant. He goes inside and swipes in. His workout begins as he stretches out on a gym mat in order to warm up for his workout. After his workout he begins training sessions with his customers. Devin is incredibly well liked and one of the most chill yet pushing instructors at the gym. Regarded as tough but understanding and kind, he can help many people stay motivated and work hard to keep themselves healthy and better themselves. His buddy, Kyle, who he helps train had just arrived.

"Ayy man what's going on?" Asked Kyle as he arrived at the gym.

"Not much. Just getting some last minute workouts in before closing. My last trainee cancelled today"

They workout together for a few more hours and go home. Lexie has dinner prepared and they both have a nice evening before bed.

The next day Devin woke up with a skin irritation on his leg. He winced when he looked at the swollen red bump.

"What is this?" He asks himself. He touched the bump and it felt warm to the touch.

"It's probably just a reaction or something. I'll just put some lotion and a band-aid on it"

Devin didn't think too much of it during his day. He didn't feel much pain just the occasional mild burn or irritation but forgot about it. At the end of the day, Devin took the band-aid off to take a shower and began noticing the redness had spread a bit on his leg. He puts more lotion on it and goes to bed, unknowing the danger he really was in.

Devin woke up and the pain was a bit worse. There was even some pus leaking out. Devin was concerned about it now. Lexie drives him to urgent care where he is seen by a doctor called, Dr. Herman Thretcher.

“This looks like a Staph infection, Devin. I am going to prescribe some penicillin. That should clear it up for you. You probably got that from your gym. Tell them to clean that equipment and floor better!”

“Thank you, doc!”

Lexie and Devin drive home to enjoy the rest of their evening. Little did they know the worst was yet to come.

A week later after taking the antibiotics twice a day. It seemed the infection was getting worse. The infection had spread to more areas on his leg while getting more inflamed and red. Devin was walking with a limp now.

“Why didn’t the medicines work?” He thought frustrated.

Devin arrived at work the next. People noticed that he wasn’t himself.

Kyle asked him, “You alright, man?”

Devin, feeling very feverish, replied, “I think I should go home...”

He barely finished that sentence before passing out on the floor.

Kyle screamed, “Call an ambulance!!”

The ambulance came and took Devin to the local hospital where he was admitted by head doctor; Dr. Thretcher.

“Looks like the Staph infection got inside the body” Dr. Thretcher said. “Penicillin had no effect on it. We are going to try a routine course of multiple antibiotics to get rid of the infection.”

The doctors put Devin on oxygen and IVs in order to keep him alive. Once the Staph infection gets into the body it can be incredibly deadly.

A few days later, the many antibiotics seemed to have no effect at slowing or stopping the infection. Devin, who is now in a coma, is really starting to go downhill. Dr. Thretcher orders a skin sample from Devin’s leg where the original infection began. It would take about a day for the results to come back. The doctors worry about Devin’s declining state. They put him in quarantine to avoid infecting other people, especially immunocompromised people in the hospital.

A day later the lab results are confirmed and their worst fear is realized, Devin had a Methicillin-resistant Staphylococcus aureus (MRSA) infection on his leg that has managed to get inside his body. No antibiotics are working. Not even the newest ones or oldest ones. The doctors had to sit helplessly as their patient slowly declined in health. The last option would be to amputate the infected leg but the infection has already spread to Devin’s lungs and all around his bloodstream. Devin can no longer breath without machines. MRSA multiplies very quickly.

About 2 days later, at around 5:00 am, Devin's heart stopped and not even the machines could keep him breathing any longer. The infection ravaged nearly every organ in his body. The doctors solemnly shut the machines down. Devin's parents and girlfriend were told the news and were shocked into silence.

"How can we have come so far in medical science and yet our own medicines and cures start to work against us?" Devin's father; Bob, asked his sobbing wife and the doctors surrounding her, giving the unbearable news to the family.

The overuse of antibiotics has caused many bacteria and pathogens such as MRSA and another superbug called Carbapenem-resistant Enterobacteriaceae (CRE) to evolve and become immune to antibiotics. Overprescription is a problem not just with antibiotics but also painkillers that have caused people to become addicted and overdose. Around 3.1 million antibiotic-resistant infections happen each year in the United States. As a result, an estimated 48,700 people die a year from these superbug infections. Big Pharma should have less of an influence over doctors to avoid overprescription. Big Pharma fuels addiction and has inherently created these superbugs. Doctors should also be more aware of the consequences of overprescription. We should take the problem more seriously and do something about these superbugs so more people don't end up like Devin.