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BRAC UNIVERSITY School of Pharmacy

PHARMA HIGHLIGHTS

Our Diet Could Be the Reason for Antimicrobial Resistance

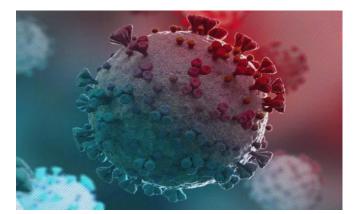


How many times have we been sick in these past few years? And was it harder than usual to beat that sickness? Even with medicine. For a while now, the world has been getting sick more often and recovering from it more slowly and it is because of what is happening with antibiotics.

When doctor prescribes you or your child antibiotics, the goal is to help you beat the sickness. But imagine a moment when all the antibiotics stop working. You get sick, you take the pill and it does not work. This is exactly what one industry is trying to hide. According to World's Health Organization, antibiotic resistance is one of the biggest threats to global health. So why are antibiotics not working and we are getting sick more often? Well, the answer is here because every single day we eat food that was fed tons of antibiotics. To illustrate, all antibiotics sold in the US, 80% are sold for raising animals, 80% are not for humans. To make meat cheaper globally, many animals are kept in tiny cages in bad conditions. This is the perfect place for a disease to spread. So, the only way to have a nice and cheap \$1 cheeseburger is to pump the animals with tons of antibiotics. When these animals take antibiotics, most of the bacteria die. But some bacteria are left behind and these ones come back stronger. They are called super bacteria. And when we eat meat, we can get these super bacteria too which is responsible for antibiotic resistance.

Remember, cheap meat equals cheap health. Instead of eating cheap meat every single day, buy organic, highquality meat and simply eat less of it. Or visit your local farms and see how they do things there and simply buy from them. It is our responsibility as consumers to send a clear signal to the rich people who run the meat and pharmaceutical industries that what is happening is bad for our future.

Written by: Kazi Fahim Monayem, ID: 18346083



Omicron is a human-infecting virus consisting of more than 300 mutations in the virus's spike protein. Being first reported in Botswana, it spread throughout the world. The common symptoms of omicron include flu, fatigue and headache. This is spreading everywhere endangering populations. The best way to stay safe from this dreadful virus is to get vaccinated, wear a

COVID-19: The Omicron Variant

mask in public, wash hands regularly and get tested if any symptoms are seen. The government is setting protocols in order to control the rapid spread of this virus. Although travel bans and restrictions were imposed in the earlier state of spreading the virus, the government has decided not to enact travel bans because it has already spread beyond borders. But the good news is that the death rate is going downward as the time passes by. Where in 2020 it was 7.48 million, in 2021 it stands at 4.2 million in the USA. The higher the rate of vaccination, the decrease is in the death rate.

It is unfortunate that omicron can still affect fully vaccinated people and boosted individuals. But the vaccinated individuals are less likely to transmit the virus. This new form of the virus is nothing but a product of natural evolution. The effective way to stop the spread at this moment is to increase the number of vaccinated individuals and increase the preventive measures like face masks and social distancing.

Written by: Mahreen Islam Ima, ID: 20146054

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Recent Advances in Medicine



Technology and medicine have gone hand in hand for many years. Pharmaceutical and medical advancements have saved many lives and improved people's lives. It is impossible to foresee what kind of health-care organizations may emerge as technology advances. We've put together a list of the top ten medical breakthroughs expected in 2022: The novel vaccinations for Covid-19 have recently brought technology to the forefront. mRNA antibodies are a replacement for traditional vaccinations because of its extreme precision, ability to create quickly, and promise for low cost of production. Virtual reality has existed for a long time. Nevertheless, it is increasingly being utilized to cure and handle a variety of psychiatric diseases or conditions, including stress, anxiety, dementia, and autism. It's also being utilized to help people manage pain more effectively by modifying their ideas and perceptions about pain. The potential for neurotechnology to enhance several parts of life is limitless. It is currently being used in the health and healthcare industries, but it has a lot of potential applications in other areas, like as teaching, corporate leadership, global defense, and even sports. In 2022, AI will be one of the most intriguing technologies transforming the healthcare environment. Whenever it came to finding illness early & an actual diagnosis faster, AI is proven to be extremely useful. For example, AI is also being used to monitor early-stage heart disease, helping healthcare providers to detect potentially life-threatening issues sooner and more effectively. Furthermore, AI is clinicians developing assisting in more thorough treatment protocols, permitting patients to better control their ailments. 3d printing have swiftly established themselves as one of the most popular technologies available in the market. 3Dprinted prosthetic are becoming increasingly popular completely because thev are customized. Unprecedented levels of relaxation and movement are possible because to this. Medical technology is becoming more personalized for specific patients as it improves. Precision medicine considers each patient's genetics, environment, and lifestyle. When using a customized drug to treat a cancer patient. Pharmacogenomics is significantly more effective than conventional treatments since it targets tumors based on the patient's DNA, activating changed genes and making cancer therapy more successful. CRISPR is the most powerful gene-editing technology ever developed. It works by utilizing the immunity system of invading virus-infected bacterium cells, which are then able to 'cut out' infected DNA strands. In 2022, technology for virtual-care meetings will advance beyond 1:1 physician video conferencing, as telehealth and telemedicine have become more widespread in the preceding two years. In response to the growing number of clients in need of psychotherapy for mental health disorders, we can expect to see technology that supports group sessions, allowing multiple patients to be supported simultaneously. Wearable technology has grown in prominence in recent years, especially since the release of Wireless in 2000. People nowadays use wearables that connect to their phones track anything from their steps, fitness, and heartbeat their sleeping patterns. Patients can use wearables to improve their activity, which can help them avoid chronic illnesses like diabetes and heart disease. By 2030, depression is anticipated to be the leading cause of sickness worldwide, demanding the development of novel therapies faster than before. In the previous year, a few innovative technologies have emerged that can help patients with their ongoing mental health issues.

Written by: Fariha Tuj Jannat, ID: 21346106