How the immune system keeps you alive

Understanding our body's super weapon

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Asimple flu isn't that serious right? It's so common. It strikes you several times in the course of your lifespan. You recover after a few days and you're fine. You should be thanking your immune system for successfully fighting microorganisms that could have sent you to your death prematurely.

More often than not, we don't even recognize that our immune system exists. When we fall ill, we just resort to medications. There is nothing wrong with seeking medical intervention. In fact, you have to. But before medications are prescribed and even before you get an appointment with your doctor, God has already provided our body with a built-in doctor. That is our immune system. Without it, merely being exposed to dust can kill us.

Have you ever wondered why some people tend to get colds easily and others just don't seem to catch colds at all? During the Covid-19 pandemic, some have successfully recovered, others have perished and fortunately, there is a lot who were not infected at all. Your risk of contract-ing infections, as well as, other illnesses such as cancer, autoimmune diseases like rheumatoid arthritis, and allergies like asthma or skin problems, is all dependent on how healthy your immune system is.

"The immune system is our super weapon. A complex network of different organs, tissues, cells, and chemicals that help defend our body against invaders, such as viruses, bacteria, parasites, and other foreign bodies. It works day and night. It is always on duty to defend us against enemies that seek to cause harm," says Dr. EE Zhang, a devoted researcher on nutritional immunology and a graduate of the University of Glasgow School of Medicine in Scotland with degrees on Bachelor of Medicine and Bachelor of Surgery.

Dr. Zhang focuses on four important lifestyle factors that will make or break our immunity. Being a physician herself, she educates people globally on primarily using nutrition to prevent and heal diseases.

"The best way to boost our immune system is through nutrition. Nothing technology has created is equal to what nature has created for us. Our big natural world contains all the wholesome foods with all the nutrients we need, plus more that scientists have not discovered yet. We need to take care of our immune system on a daily basis by eating more plant foods rich in antioxidants, phytochemicals, and polysaccharides."

Don't make the mistake of overworking yourself if you are feeling a bit under the weather. Experts recommend consuming at least three servings of vegetables and two servings of fruits every day. That would be around one and a half cups of cooked vegetables or three cups of leafy greens and about two mediumsized bananas. How much fresh fruits and vegetables do you have in a day? If you aren't consuming this much at the bare minimum, then you better start reflecting on why you're not feeling your best every day. Secondly, Dr. Zhang emphasizes having regular exercise. The American Cancer Society recommends 150 to 300 minutes of moderate-intensity exercise or 75 to 150 minutes of vigorousintensity exercise for adults every week.

"Moderate activities are activities that make us breathe a little harder, like brisk walking or biking. Vigorous activities make our heart beat faster and cause us to sweat, such as running. Being more physically active, even if it is something small like a five-minute walk or taking a flight of stairs, can bring many health benefits"

Dr. Shang explains that exercise directly helps our immune system by making our muscles contract. Thus, making our lymph nodes flow better. The lymph carries and transports our immune cells to where they need to be. Unfortunately, the lymphatic system solely relies on movement because it does not have a pump, unlike the circulatory system which relies on the heart to pump blood all over the body. Are you spending more time sitting down? You better get moving! After movement or being physically active comes the need for rest and relaxation. "Exercise and rest are interconnected. In fact, exercise improves our quality of sleep! Many of us end up mentally tired at the end of the day but not physically tired, and we might have difficulty falling asleep" shares Dr. Zhang.

Studies have shown that people who get inadequate sleep or have poor sleep quality are more likely to fall prey to infection and recover slowly from illnesses. Have you ever wondered why you could barely keep your eyes open when you are sick with the flu? That drowsy feeling is caused by your immune system willing your body to sleep in order to repair cells, conserve energy, and recover. Don't make the mistake of overworking yourself if you are feeling a bit under the weather. Chances are, your simple case of flu can become a full blown infection like pneumonia that can be fatal when your immune system isn't able to fight it off even with medications.

Lastly, Dr. Zhang mentions mental well-being as one of the four lifestyle factors that can positively or negatively impact our immune system. "A little stress now and then is not something to be concerned about. However, ongoing, chronic stress can cause or exacerbate serious health problems."

Stress during a dangerous situation is beneficial. We need the fight and flight response of the body to get us out of danger. However, chronic stress is not only associated with heart disease, obesity, gastrointestinal problems, diabetes, cancer, autoimmune problems, cancer, skin issue and more. Longterm stress compromises the immune system because the stress hormone cortisol is sustained at high levels. This leads to higher inflammation in the body. This in turn suppresses the immune system by lowering the immune cell production like the lymphocytes or white blood cells that you need to fight viruses, bacteria, and other pathogens. Prevention is always better than cure. Don't take simple flu-like symptoms lightly. Take care of your immune system so you can recover faster. Better yet, make it a habit to eat wholesome,

minimally processed fruits and vegetables, be physically active, get quality sleep and try your best to be mentally and emotionally well to ensure that your immunity is at its best and you don't get sick in the first place.

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