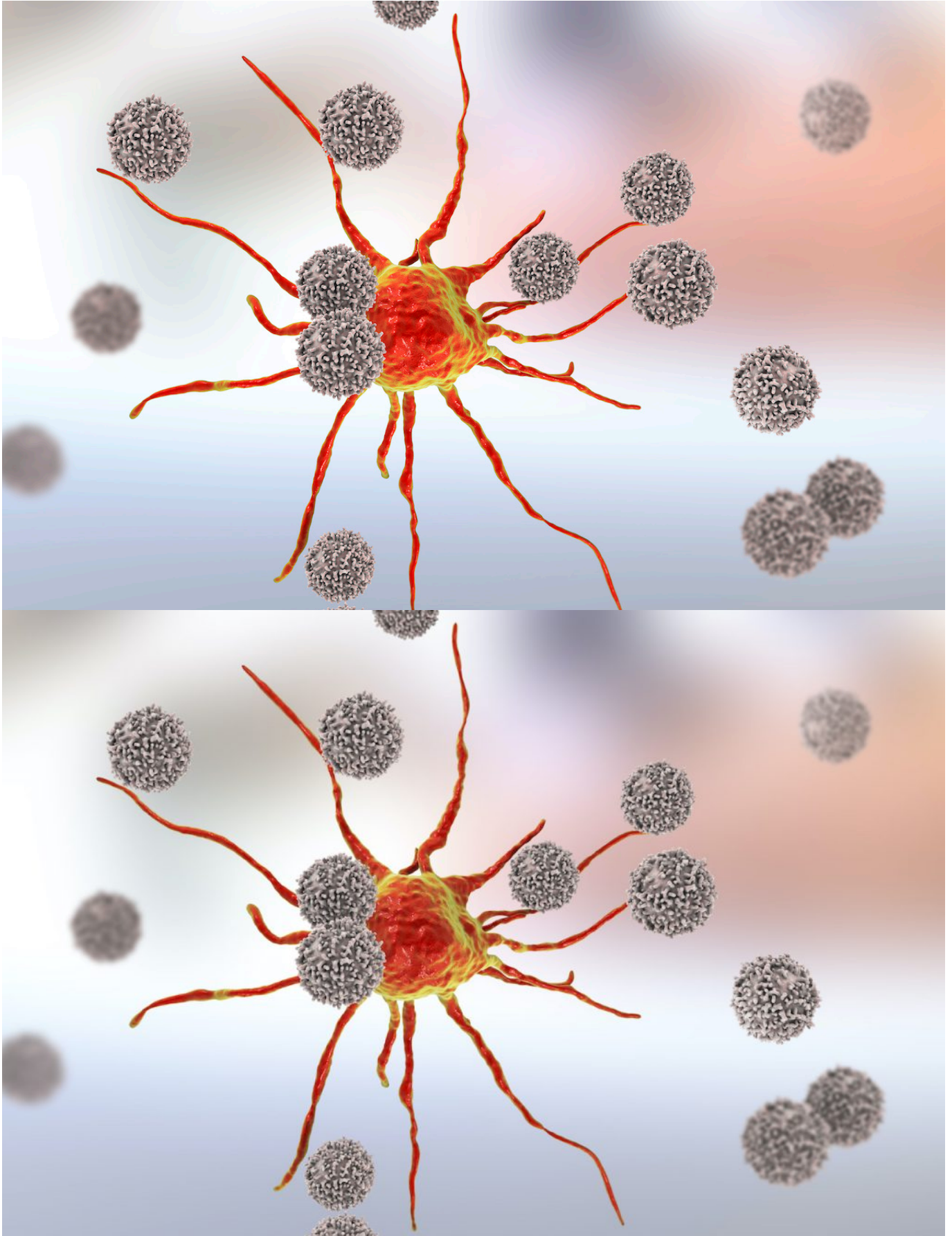


Immunity in the Post-Pandemic World



David Heber M.D., PhD, FACP, FASN - Chairman, Herbalife Nutrition Institute

As the world reopens industries, shops, and restaurants, we have to keep in mind one thing: the pandemic is not over yet and we still need to be mindful of health and hygiene measures.

We have to maintain practical prevention measures, such as keeping proper hygiene, wearing a mask, and maintaining social distancing. That said, a strong immune system is more imperative than ever, as it's critical to the defense against viral infections.

What Is Immunity?

Simply put, immunity is protection from disease.

The immune system does not exist in one single part of the body, it is actually made up of a network of cells, molecules, tissues, and organs working together to protect the body. Each of these components plays a significant role in how the immune system works and its function, which is crucial to preventing infection.

There are two categories of immune functions in everyone's body:

1. Innate immunity, which prevents diseases from entering the body
2. Adaptive immunity, which eliminates or prevents the growth of pathogens, such as viruses and bacteria, in our body.

How Does the Immune System Work?

The immune system works to limit the access of microbes to the body and prevent them from growing and causing illness.

If the immune system encounters a virus, it mounts a so-called immune response – how your body recognizes and defends itself against bacteria, viruses, and substances that appear foreign and harmful.

Increasing the body's immunity is not as straightforward as it sounds. There remains much about the immune system that researchers are still working to understand, but what we do know is the tangible connection between the immune system and nutrition.

Why Nutrition Is Critical to Immunity

To understand how nutrition and diet affect an individual's immune system, we need to delve deeper into the role of epigenetics: the study of biological mechanisms that switch our genes on and off.

While all humans are 99.9% genetically identical, **epigenetics** makes us unique by the different combinations of genes that turn on and off – which explains why some of us have red hair and others black, or why some of us have darker or lighter skin, for instance.

What we eat, where we live, how much we sleep, how we exercise, and even who we live with, all causes chemical reactions that can alter our health status. Added to the mix is our microbiome, which are the microorganisms we depend on to protect us against germs, break down food for energy, produce vital vitamins, and bolster our immune system.

The largest part of the immune system – approximately 70 percent of it – is located near the intestines, which monitors the intake of food and how the body uses it. This makes it critical for us to consume a balanced diet with the right vitamins, minerals, and nutrients while maintaining a healthy lifestyle. This requires more than just changing the intake of one or two nutrients but involves balancing the entire diet to ensure that there is optimal nutrition intake at a cellular level.

There are four essential groups of nutrients to help individuals strengthen their immune system:

- Protein
- Vitamins and phytonutrients
- Probiotics and prebiotics
- Omega-3 fatty acids

Additional Tips to Keep Your Immune System Strong

Maintaining a strong immune system through a balanced diet and a healthy lifestyle is the best way towards naturally protecting yourself from the risk of infection. In addition, you can reduce your chances of being infected or spreading COVID-19 by taking some simple precautions from the World Health Organization:

- Wash your hands often with soap and water for at least 20 seconds. If soap and water are not available, use a 60-percent alcohol-based hand sanitizer. Avoid touching your eyes, nose, and mouth with unwashed hands.
- Avoid close contact with people who are sick.
- Stay home when you are sick.
- Cover your cough or sneeze with a tissue, then throw the tissue in the trash.
- Clean and disinfect frequently touched objects and surfaces.