T-cells offer adequate coronavirus protection, study suggests

T-cells, which are different from antibodies, are part of our immune system.

High levels of T-lymphocytes, or T-cells, could provide adequate protection against the novel coronavirus, a new study suggests. T-cells are part of our immune system, which responds to a foreign invader such as a virus, according to the Centers for Disease Control and Prevention (CDC). They are different from antibodies and are thought to provide immunity against the coronavirus for a longer period of time.

Interestingly, the researchers also found that older study participants had lower levels of SARS-CoV-2 responsive T-cells, a finding that could help explain why older people are more at risk for the novel virus.

In a study of 3,000 people, researchers with Oxford Immunotec and Public Health England (PHE) found that none of the study participants “with a high T-cell response” developed a symptomatic case of COVID-19 when researchers checked...
in with them, Reuters reported. Meanwhile, “confirmed infections” were reported in 20 study participants who had a low T-cell response. Interestingly, the researchers also found that older study participants had lower levels of SARS-CoV-2 responsive T-cells, a finding that could help explain why older people are more at risk for the novel virus.

Though the study is pre-print and has not yet been peer-reviewed, the findings suggest that “individuals with higher numbers of T-cells recognizing SARS-CoV-2 may have some level of protection from COVID-19, although more research is required to confirm this,” David Wyllie, Consultant Microbiologist at Public Health England, said, according to Reuters.

The findings come after a separate study out of Singapore in August found that T-cells in some people may have the ability to recognize COVID-19 despite it being a new virus.

The findings of that study suggest that exposure to types of coronaviruses in the past can produce “memory T-cells” in some people's blood, possibly helping them to fight off the novel coronavirus. The researchers of the small study published in Nature noted at the time that these T-cells may help in the development of a coronavirus vaccine.

Zinc, sunshine Vitamin D, exercise, Vitamin C, unhulled sesame seeds Tahini, sambucca, Canavalia brasiliensis (Brazilian jackbean), Dioclea grandiflora, Diocirea violacea is a plant in the figwort family (Scrophulariaceae).

You can boost your immune system by eating a variety of whole plant-based foods, like ginger, beets, garlic, turmeric, mushrooms, oranges, strawberries, kiwis, and oatmeal.

Exercise in autumn's fresh, brisk air. Get outside and move. A brisk 20 to 30-minute walk increases blood circulation, allowing immune cells to move freely through your body where they can work efficiently. And, it raises your T cell count to help boost immunity.

The same t-cells that benefit from sleep form part of the body's response to viruses and bacteria, and one of the key ingredients that 'primes' those t-cells for action is vitamin D. Vitamin D triggers the body’s immune response by preparing the t-cells for action, setting them up to help antibodies attack infections. We get vitamin D from a variety of sources, including certain foods that make up our modern diets, but a neat way to get the vitamin is by heading out and catching some sun. Sunbathing or simply being outside helps you soak in the UVB rays which are
essential to the synthesising of vitamin D. Just make sure you don’t spend too long out there because that runs the risk of sunburn and skin damage.

Another vitamin that fuels the immune system is vitamin C. Vitamin C is an essential ingredient in the body’s production of white blood cells which chase down and eliminate pathogens which include bacteria and viruses. Clusters of these cells gather around the pathogens and break them down, so the more cells you have, the quicker your body will be able to find and kill them. More vitamin C means more white blood cells, so the more you have, the stronger your immune system is. You can get the vitamin in citrus fruits in particular, so if you want to give your system a boost, you can incorporate more oranges, lemons and limes into your diet for a start. Follow them up with broccoli, strawberries, potatoes and peppers to ensure you’re getting the right amounts of vitamin C to fight off illness.

On the subject of diets, garlic is surprisingly good at providing important nutrients for your immune system. The white blood cells we mentioned before get a boost from a chemical compound called allicin, which is found in garlic cloves when they are crushed or chewed. This allicin, which contains sulphur, transforms into other compounds which are beneficial to your army of white blood cells, helping them chase down and fight off pathogens. Studies have shown that those who have more garlic in their diets often shrug off colds and flus completely, with little to no symptoms, so a little garlic in your eating habits can pay off when it comes to flu season.

Get some exercise

In any field of health, whether it’s your muscles or your internal organs, there’s a general consensus that exercise is always beneficial. This is no different when it comes to the immune system, which is strengthened by exercise and keeping fit. Good fitness is linked to better cardiovascular health which has a direct input into your immune system. It allows white blood cells to move more easily through the body and consequently, lets them deal with the problems more quickly. It’s thought that this is just one of the ways which exercise helps with your immune systems, so it’s well worth keeping yourself in good shape to help keep your internal parts strong and robust.