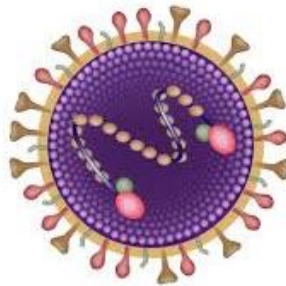


Zinc levels change in response to oxidative stress induced by Respiratory Syncytial Virus

At DBT's Translational Health Science and Technology Institute (THSTI), Faridabad, Dr. Guruprasad Medigeshi and his team conducted a series of interesting experiments with Respiratory Syncytial Virus (RSV) infecting A549 cell line to delineate the role of Zn in modulating infection.



These findings may help understand the mechanism by which Zn supplementation can help fight off RSV infection. Upon infection with RSV, oxidative stress is induced in the cell, which further creates a suitable environment for the replication of viral particles. The infected cells simultaneously increase Zn uptake to counter the infection. These findings further strengthen the supposed role of Zn in homeostatic mechanisms of health and disease. It also underscores the importance of Zn in a healthy diet and a healthy community.

In 1960s, an Iranian farmer ate unrefined flatbread, potatoes, and milk only, and he was missing other nutritious elements in his diet that caused him hypogonadism, anemia and dwarfism. Upon being fed zinc (Zn) rich animal-protein foods, the issue of hypogonadism was treated. In 1961, it was established that Zn deficiency can cause human health problems. In 2020, humans continue to face health problems from Zn deficiency more so in developing countries. It could further be challenging to healthy sustenance as a recent study by a group of researchers from THSTI, Faridabad highlights the role of Zn in fighting off infection caused by RSV.

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