## SUPPLEMENTS AND THEIR EFFECTS ON THE IMMUNE SYSTEM



	DEFFICIENCY	SUPPLEMENTATION
SUPPLEMENT		
Vitamin A	Multiple disfunctions with the immune system. Affects NK cells, B cells and T cells. Prone to contracting infections	Beneficial to childhood illness. Reduces risk of serious complications from infections.
Vitamin B6	Reduced lymphocytes, lower antibody responses. Others	Not well researched.
Vitamin B12	Lowered immune responses. Affects T-cells.	Improves function and repair of the nervous system.
Folate	Lowered immune responses. Reduced T-cell proliferation. Reduced lymphocytes. Changes cytokine production. Affects thymus gland.	Improves function of Thymus gland Increases production of various immune cells: T- cells, NK cells, others
Zinc	Increased risk of infections, diarrhoea, pneumonia. Respiratory susceptibility Affects thymus gland.	Reduces risk of pneumonia and faster recovery rate. Reduces susceptibility to common colds and improves recovery rate.
Vitamin C	More severe infections and pneumonias. Susceptibility to infection and cancer. Slow wound healing.	Protective effects on lymphocytes and leukocytes. Faster recovery from pneumonias and other infections.
Vitamin D	Susceptibility to infections. Reduction in immune cells.	Improved immunity Reduction in severity from respiratory tract infections.
Vitamin E	General underperformance of immune system esp. B and T lymphocytes.	Improved immunity. Reduction in severity from respiratory tract infections.
Iron	Reduced lymphocyte activity on bacteria. Reduced cytokine function. Poor response from NK cells	Improved immune response to pathogens. Inappropriate supplementation may favour pathogen function.
Selenium	Poor immunity. More aggressive virus attacks.	Improves immunity esp. cell-mediated Better response of immune system to viruses. Inappropriate supplementation may worsen allergic asthma.
Copper	Reduced levels of neutrophils	High levels of administration may lead to reduced antibody production following response to influenza vaccine.