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*Adequate nutrient intakes are required for the immune system to function efficiently. A good multivitamin can enhance the immune system by supporting the body's natural defenses on both a structural and cellular level.*

# MULTIVITAMINS AND HEALTHY IMMUNE FUNCTION

An article published in the British Journal of Nutrition summarizes the roles of select vitamins and trace elements in immune function. Adequate intakes of micronutrients are required for the immune system to function efficiently. Micronutrient deficiency suppresses immunity by affecting antibody responses, leading to imbalances in the immune system. This situation increases susceptibility to infections, which increases disease and death risk. In addition, infections aggravate micronutrient deficiencies by reducing nutrient intake, increasing losses, and interfering with utilization by altering metabolic pathways. Inadequate intakes of micronutrients are common in people with eating disorders, smokers (active and passive), individuals with chronic alcohol abuse, certain diseases, during pregnancy and lactation, and in the elderly.

Micronutrients contribute to the body's natural defenses on three levels by supporting physical barriers (skin/mucosa), cellular immunity, and antibody production. Vitamins A, C, E, and the mineral zinc assist in enhancing the skin barrier function. Vitamins A, B6, B12, C, D, E, and folic acid, and the minerals iron, zinc, copper and selenium work synergistically to support the protective activities of the immune cells. Finally, all these micronutrients, with the exception of vitamin C and iron, are essential for the production of antibodies.

Overall, inadequate intake and status of these vitamins and minerals may lead to a suppressed immune system, which increases the risk of infections and aggravates malnutrition. Therefore, supplementation with a multivitamin that includes these micronutrients can support the body's natural defense system by enhancing all three levels of immunity.

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