A great number of infectious diseases exert a direct or indirect effect on nutrition and nutritional status. These effects are partly specific and partly unspecific.


Interaction of Nutrition and Infections Globally: An Overview
by M.B. Krawinkel

Key insights
Undernutrition is an effective immunosuppressant, while infections often compromise nutritional status. The interactions between infections and malnutrition are manifold: improving nutritional status has great potential in preventing and managing infections.

Current knowledge
Associations between undernutrition and a higher risk of infections have been documented in different age groups in different countries, mostly in clinical settings. The immunosuppressive effect of undernutrition starts during intrauterine life. Pathophysiologically, many types of undernutrition interfere with immune functions and thus enhance the susceptibility to a number of infections. Recent research suggests that not only undernutrition but also caloric overnutrition impacts on immune response to infections and immunizations via neuroendocrine alterations.

Practical implications
Infectious diseases impact on the nutritional status, either specifically or through unspecific mechanisms such as anorexia, tachypnea, and vomiting. Infections in undernourished children are a common cause of death, and taking this finding into account helps to reduce the case fatality rate in severely malnourished patients.

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