

Zinc homeostasis and immunity

Lothar Rink and Hajo Haase

Institute of Immunology, RWTH Aachen University Hospital, D-52074 Aachen, Germany

Zinc is an essential trace element for the immune system, and zinc deficiency compromises the function of primarily T cells but also of several other immune cells. Recently, zinc homeostasis has been demonstrated to affect dendritic cells, in particular the involvement of zinc transport proteins during lipopolysaccharide-induced upregulation of major histocompatibility complex proteins and co-stimulatory molecules. This adds to our understanding of the immunomodulatory potential of zinc and highlights its significance for immune function.