

# ZINC SUPPLEMENTATION MIGHT BE BENEFICIAL TO IMPROVE IMMUNITY DURING VIRAL INFECTIONS<sup>1</sup>



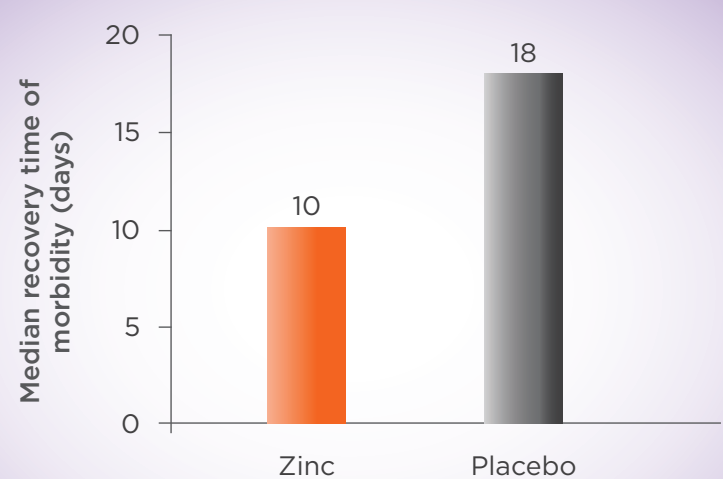
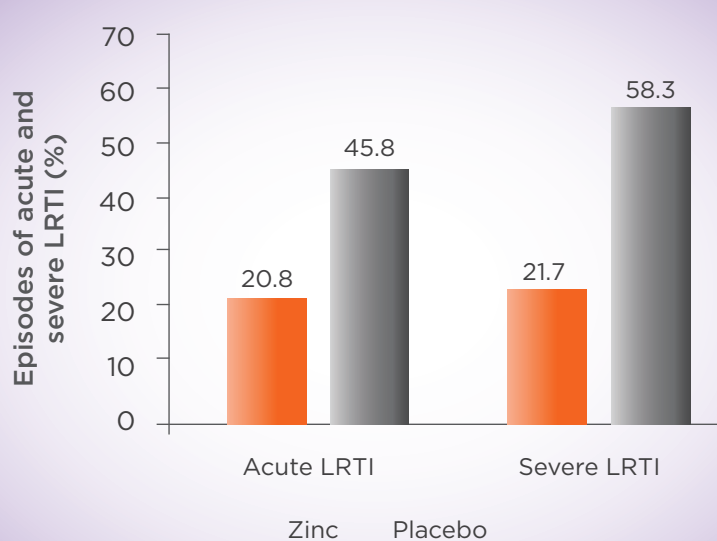
## Zinc supplementation in children

- **Greater improvement** in respiratory rate & oxygen saturation in pneumonia<sup>1</sup>

- **Increased** cytokine response in Th1 pattern (IL-2 & IFN- $\gamma$ ) in pneumonia<sup>1</sup>

- **>2-fold fewer episodes** of acute & severe LRTI<sup>2</sup>

- **Significantly shorter** recovery time of respiratory morbidity in LRTI<sup>2</sup>

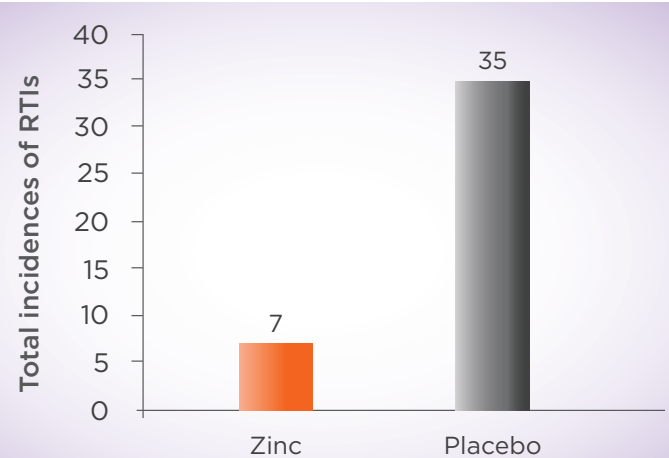


## Zinc supplementation in adults/elderly

- **Mitigates** age-related changes in immune function<sup>3</sup>

- **5-fold lower incidences** of RTIs vs. placebo during 12 months of supplementation<sup>4</sup>

- **Increases humoral response** after influenza vaccination<sup>#1</sup>



- **Significantly decreases** TNF- $\alpha$  and oxidative stress markers<sup>4</sup>



For the use of a Registered Medical Practitioner or a Hospital or a Laboratory use only.

\* Via phagocytosis & oxidative burst, # Zinc + Selenium supplementation. **IL:** Interleukin. **IFN:** Interferon. **LRTI:** Lower Respiratory Tract Infection. **RTI:** Respiratory Tract Infection, TNF - Tumor Necrosis Factor,

**References:** 1. Jayawardena R, Sooriyaarachchi P, Chourdakis M, Jeewandara C, Ranasinghe P. Enhancing immunity in viral infections, with special emphasis on COVID-19: A review. *Diabetes Metab Syndr.* 2020;14(4):367-382. 2. Shah UH, Abu-Shaheen AK, Malik MA, Alam S, Riaz M, Al-Tannir MA. The efficacy of zinc supplementation in young children with acute lower respiratory infections: a randomized double-blind controlled trial. *Clin Nutr.* 2013;32(2):193-199. 3. Hodkinson CF, Kelly M, Coudray C, et al. Zinc status and age-related changes in peripheral blood leukocyte subpopulations in healthy men and women aged 55-70 y: the ZENITH study. *Eur J Clin Nutr.* 2005;59 Suppl 2:S63-S67. 4. Prasad AS, Beck FW, Bao B, et al. Zinc supplementation decreases incidence of infections in the elderly: effect of zinc on generation of cytokines and oxidative stress. *Am J Clin Nutr.* 2007;85(3):837-844.

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