

# ZINC

## SPOTLIGHT ON WINTER IMMUNITY

### What is Zinc?

Zinc is an essential trace mineral that plays a vital role in the body and that can only be acquired through diet or supplementation. Zinc cannot be stored in the body so daily intake is important.(1)

### Why is Zinc so important?

Zinc is required for over 300 enzyme dependent chemical reactions to happen in the body. It also plays a vital role in: metabolism, growth and development, protein synthesis, wound healing, skin health, DNA synthesis, fertility, digestion, neurotransmission, fertility, hormonal balance, sense of taste and smell and immunity.(1) Zinc deficiency affects as much as 25% of the global population.(1)

### Zinc and immunity

Zinc deficiency may cause the innate and adaptive immune system to 'malfunction', leaving our body unable to defend itself appropriately against harmful bacteria and viruses.(1,2) Deficiency may also increase inflammation in the body and has been shown to play a role in dermatitis, inflammatory bowel diseases (Crohn's or Ulcerative Colitis) or rheumatoid arthritis.(1,2)

Research has also shown that supplementation with Zinc may reduce the duration and severity of the common cold if administered within 24 hours of the first symptoms.(3,4)

### Recommended Zinc intake

Men - 9.5mg/day

Women - 7mg/day

Pregnant women - 12mg/day

Breastfeeding women - 13mg/day

### Food sources of Zinc

Zinc can be found in oysters, pumpkin seeds, ginger root, meat (e.g. beef, lamb, pork), beans and legumes (e.g. split peas, black beans, lentils), nuts (e.g. pecans, almonds, peanuts), fish and other seafood (e.g. crab, prawns, mussels), whole grains (e.g. buckwheat, whole wheat, oats), dairy products (e.g. milk, cheddar cheese), eggs and dark chocolate.

1. Bonaventura, P., et al. 2015. Zinc and its role in immunity and inflammation. *Autoimmunity reviews*, 14(4), pp.277-285.

2. Maares, M. and Haase, H., 2016. Zinc and immunity: An essential interrelation. *Archives of biochemistry and biophysics*, 611, pp.58-65.

3. Hulisz, D., 2004. Efficacy of zinc against common cold viruses: an overview. *Journal of the American Pharmacists Association*, 44(5), pp.594-603.

4. Hemilä, H., et al. 2016. Zinc acetate lozenges for treating the common cold: an individual patient data meta-analysis. *British journal of clinical pharmacology*, 82(5), pp.1393-1398.