

# Zinc!

ISABELLA FEDELE, DIETITIAN

## WHAT DOES IT DO?

Zinc has a role in metabolism, cell division and growth, immune defence, wound healing, cognitive function, bone health and regulating gene expression. It is also needed for the senses taste and smell.

In the body, zinc is absorbed in the small intestine and is mostly stored in skeletal muscle and bone.

## DEFICIENCY MAY BE FOUND IN PEOPLE WHO...<sup>1</sup>

- Have a poor intake
- Have increased requirements (children, adolescents, pregnant women)
- Are malnourished
- Have chronic diarrhoea or inflammatory bowel disease (crohn's disease, ulcerative colitis)
- Had gastric-bypass surgery
- Have diabetes or chronic kidney disease
- Have an iron deficiency or sickle cell anaemia
- Are alcoholic
- Are vegetarian or vegan
- Are elderly
- Have hypothyroidism<sup>2</sup>
- Are on medications that inhibit absorption (diuretics, ACE inhibitors, steroids, PPI's, laxatives)

## CLINICAL SIGNS AND SYMPTOMS OF DEFICIENCY<sup>3</sup>

- Impaired immune function
- Poor wound healing/acne/eczema
- Poor appetite, taste and smell
- Mental fatigue/depression
- Poor sleep
- Diarrhoea
- Leukonychia (white spots of nails)
- Dry skin, stretch marks
- Hair loss
- Stunted growth in children

## RECOMMENDED DAILY INTAKE

### CHILDREN AND ADOLESCENTS

- 1-3 yrs = 3mg/day
- 4-8 yrs = 4mg/day
- 9-13yrs = 6mg/day
- 14-18yrs  
Boys = 13mg/day  
Girls = 7mg/day

### ADULTS (>19 yrs)

- Men = 14mg/day
- Women = 8mg/day

# Common food sources

## CASHEWS

2mg per 1/4 cup



## LEGUMES

2mg per 1 cup cooked



## WHOLEMEAL BREAD

3mg in 2 slices



## PUMPKIN SEEDS

1.5mg per 1 tablespoon



## LAMB

4mg per 100g



## OYSTERS

9mg per 3 medium



## BEEF

7mg per 100g



## WHEAT GERM

4mg per 1/2 cup



## PORK

2mg per 90g



## CHICKPEAS

2mg per 1 cup



### Useful Resources:

1. <https://academic.oup.com/advances/article/6/2/224/4616692>
2. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3746228/>
3. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3724376/>