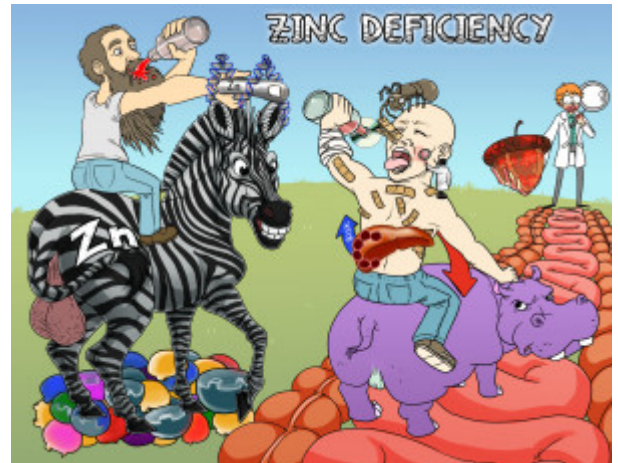


## Zinc Deficiency

Zinc deficiency is marked by a variety of symptoms due to the fact that zinc is an essential metallic element used in over 100 enzymatic reactions. Zinc is commonly used as a stabilizer in a small protein structural motif called a zinc finger that is commonly used for binding DNA and RNA as transcription factors. Zinc deficiency can present in a multitude of ways including changes in smell, taste, hair growth, wound healing as well as hypogonadism and a perioral rash. A common population with this deficiency is severe alcoholics due to poor nutritional intake and poor absorption.



PLAY PICMONIC

### Mechanism

#### Used in Over 100 Enzymes

##### [Bed of Enzymes](#)

The metallic element is essential for the functional composition of over 100 enzymes.

#### Zinc Finger Formation

##### [Zinc Finger DNA-ribbon](#)

A zinc finger is a small protein structural motif stabilized by zinc; this creates a unique three-dimensional shape that allows for protein binding. This motif is commonly used for binding DNA and RNA as transcription factors.

### Signs and Symptoms

#### Delayed Wound Healing

##### [Multiple Wounds and Bandages](#)

Zinc is essential for several enzymes involved in wound healing. Therefore, a zinc deficiency results in the inability to properly heal, especially from superficial cuts.

#### Hypogonadism

##### [Hippo-gonads](#)

Zinc deficiency can result in hypogonadism due to poor sex hormone production.

#### Decreased Adult Hair

##### [Adult with No Hair](#)

Zinc deficiency can result in decreased hair growth, especially adult hair growth like hair in the axillary and pubic regions.

#### Dysgeusia

##### [Disc-juice](#)

One of the first signs of zinc deficiency is the distortion of taste.

#### Anosmia

##### [Ant-nose-plug](#)

Zinc deficiency can result in the inability to smell or a distinct change in olfaction.

#### Perioral Rash

##### [Perioral Rash Examined by Dermatologist](#)

Zinc deficiency can also present as a nonspecific perioral rash.

### **Acrodermatitis Enteropathica**

[Acorn-dermatologist and Intestine-path](#)

Acrodermatitis enteropathica is a disorder that arises from zinc deficiency. Patients display dermatitis, alopecia, and diarrhea. The skin is primarily affected, manifesting as blistering, dry skin, sometimes with pustule formation. These skin lesions are also at risk for secondary infection by bacterial or fungal pathogens.

### **Increased Risk in Patients with Cirrhosis**

[Up-arrow Risk C-roses-on-liver](#)

Zinc deficiency is associated with patients who have alcoholic cirrhosis due to poor dietary intake as well as poor absorption.