We rely on zinc for some of our most important body functions, like immune support and cell repair. But here's the catch: our bodies can produce zinc on their own. This is why zinc from our diet is essential; in some cases, supplementation is a great solution to bridge the gap. Unfortunately, these supplements do not always sit that well and can trigger nausea. So, how can something so vital leave you feeling queasy? It all comes down to how your body processes zinc, specifically when taken excessively or improperly. This article explores why this happens and how to keep nausea at bay.

What is zinc and why is it important?

Zinc is a trace mineral, which means even small amounts of this micronutrient can provide your body with full health benefits. The real power of zinc is rooted in its immune-support capabilities, particularly how it potentiates the activity of immune cells (such as T-cells and macrophages) that act as your first line of defense. These cells depend on zinc to properly do their jobs or recognize and destroy an invader right when an infection strikes.

Zinc deficiency, on the other hand, weakens the immune system and leaves the body more susceptible to illness. This trace mineral is evidently essential for growth and skin integrity. It encourages the growth of new cells and is vital in wound healing through its DNA synthesis functions. Low zinc levels could be to blame if your sense of taste or smell seems off, as they support **the sensory receptors** responsible for these senses.

Daily zinc dose recommendations

When dietary intake of zinc is not enough, a boost of oral zinc supplements can be pretty helpful. Zinc intake recommendations vary by age and sex, but here is a rough breakdown of dietary reference intakes to make sure you're taking zinc supplements in the optimal range.

- **People assigned male at birth** (aged 19+): 11 mg/day
- **People assigned female at birth** (aged 19+): 8 mg/day
- **Pregnant individuals**: 11 mg/day
- **Breastfeeding individuals**: 12–13 mg/day
- **Children** (9–13 years): 8 mg/day
- **Younger children** (4–8 years): 5 mg/day

Can zinc really make you nauseous?

Despite its benefits, too much zinc can easily become a source of uncomfortable adverse effects. Research shows that when zinc interacts with your stomach lining, causing **gastric irritation** that often results in nausea, particularly after the initial dose of the supplement. Zinc has a **strong metallic taste** that may further precipitate these nauseous sensations.

Taking zinc on an empty stomach substantially exacerbates the situation and invites trouble. Without food to buffer the effect, zinc enhances the production of stomach acid and leads to further discomfort and nausea.

How zinc supplement form affects nausea

The form of zinc you choose can highly determine how your body handles it, especially in terms of digestive impact. Not all types of zinc are created equal when it comes to potentially inducing nausea, where some types pose a higher risk compared to others.

- **Zinc gluconate** is one of the most available forms found in lozenges and over-the-counter with a pocket-friendly price. It may cause stomach upset and nausea, specifically when taken at higher dosages.
- **Zinc sulfate** is another inexpensive form mostly prescribed to manage zinc deficiency. It may be more likely to cause stomach irritation and can easily lead to nausea.
- **Zinc citrate** is absorbed efficiently as studies reveal. It is less irritating compared to other forms and has a less bitter taste.
- **Zinc acetate** is often found in cold remedies and lozenges. It's considered a gentler form, although it could still cause nausea in people with sensitive stomachs.
- **Zinc picolinate** is an acid form of zinc and is thought to be one of the best-absorbed forms. It has a much less profound impact on the digestive system and is unlikely to cause nausea if taken in the proper dosage.

As with any supplement, it is crucial to speak to a healthcare professional if you considering adding zinc supplements to your routine. They can provide advice and counseling to help you make the right choice.

Tips on proper zinc intake

Zinc supplements don't have to make you queasy. Here are some evidence-based tips to help you balance zinc intake while experiencing the least amount of side effects.

Take zinc with food

Food is your best friend when it comes to avoiding nausea from zinc supplements. Food, especially a meal containing heavy protein or fats like eggs or yogurt, helps buffer the zinc and reduces the likelihood of an upset stomach.

Best time of day to take zinc

Although there is no set rule concerning zinc intake timing, it is generally best to avoid taking it in the morning, especially if you're more prone to nausea. Taking zinc post-meal, like lunch or dinner, prevents you from experiencing discomfort on an empty stomach.

Use the correct form of zinc supplement

Many forms of zinc serve slightly different purposes in the body. If zinc sulfate or gluconate causes stomach irritation and nausea, switch to softer forms like citrate or picolinate.

Consider food-based sources

Zinc deficiency is a zinc blood level of less than 70 mcg/dL. In such cases, supplemental zinc is needed. However, if your zinc levels are within the optimal range, perhaps a more efficient way to receive a daily dosage is to consume many foods with a high zinc level.

Food sources of zinc include red meat, poultry, beans, fortified cereals, and oysters having the greatest concentration of zinc at 32 mg per 3 ounces.

Maximum daily zinc supplement dosage

Since upper zinc levels are associated with adverse effects, this nutrient's tolerable upper intake level should not be surpassed. These represent the highest average daily nutrient intake levels at which no adverse health effects are likely to occur.

Here's an aged-based breakdown of the maximum daily doses:

- **1–3 years**: 7 mg
- **4–8 years**: 12 mg
- **9–13 years**: 23 mg
- **14–18 years**: 34 mg
- **19+ years**: 40 mg

When should you be concerned about zinc-induced nausea?

It is not always a given fact that nausea caused by zinc supplements is a harmless side effect. Sometimes, it can be a sign of something more severe, like zinc toxicity. Learning when concern is warranted is important to avoid long-term health risks and know when to seek help.

Acute zinc poisoning

Acute zinc toxicity can be caused by sudden and excessive consumption of zinc, particularly highly soluble forms. This may manifest as increased nausea, **vomiting**, **stomach cramps**, and **diarrhea**. These symptoms can indicate that you may be taking too much zinc too fast.

More severe symptoms of zinc overdose can also lead to dizziness and **lethargy**. It's also worth mentioning that **inhalation of zinc fumes** could also result in zinc toxicity that transpires as recurrent **dyspnea (shortness of breath)** or **airway inflammation** after inhalation exposure. These symptoms should not be taken lightly, and prompt medical attention should be sought in such cases.

Though very rare, this condition requires immediate attention as the condition tends to worsen rapidly, and medical assistance is often required to treat zinc poisoning.

Effects of long-term intake

Long-term use of zinc in high doses can result in more severe but insidious complications. Prolonged zinc toxicity may present itself as chronic nausea. However, it can also hinder copper and iron absorption and contribute to more profound conditions like **copper deficiency**.

Why does this happen? Evidence shows when excessive doses of zinc are ingested, it can interfere with the body's ability to absorb copper. Deficiency of copper in turn is a precursor for **anemia**, **low energy**, and even **neurological problems**.

Other potential causes of nausea linked to zinc

Zinc doesn't always agree with other substances. If taken simultaneously with antibiotics like tetracyclines or supplements such as calcium or iron, zinc will obstruct their absorption and may lead to stomach unease, including nausea. If you have to take zinc and other meds, try **spacing them out by taking them two hours before or four hours after zinc** so your body will have enough time to absorb all nutrients properly and minimize the risks of any interactions.

While uncommon, **certain individuals are sensitive to zinc and can develop allergic reactions** from the mineral in supplement form. This reaction can manifest as symptoms of nausea, urticaria (hives), swelling, or even breathing difficulties. In particular, allergies may arise from certain fillers or binders used in supplements or zinc in very sensitive individuals.

In the event of a true zinc allergy, use must be discontinued immediately, and a health professional should be consulted.

Although zinc is a mineral shown to have significant health benefits, it can often cause nausea, especially on an empty stomach or when consumed in high doses. Ease discomfort and minimize chances of nausea by taking your zinc with food, choosing less irritating forms, and spacing supplements and medication throughout the day. If nausea is severe and/or not relieved, consult a healthcare professional for advice on how to take your supplement or medication.

FAQ

Does zinc always cause nausea?

No, zinc does not always cause nausea. It all depends on how you administer it. Taking zinc with food and a suitable form can drastically affect comfortable absorption.

Is nausea from zinc temporary?

Nausea from zinc is typically temporary and may start shortly after taking it, lasting anywhere from a few minutes to a few hours. Once your body absorbs the zinc fully, the nausea should subside.

Can zinc lozenges cause nausea too?

Yes, zinc lozenges can cause nausea, especially when taken too frequently. Lozenges that contain a high dose of elemental zinc can irritate the stomach, so moderation is key to avoiding discomfort.

Key takeaways

- Zinc supplements can irritate stomach lining and cause nausea, specifically when taken on an empty stomach or in high doses.
- Nausea can be minimized by taking zinc supplements with food and choosing gentler forms, such as zinc citrate or picolinate.
- Long-term intake of zinc in high doses may lead to zinc toxicity and interfere with the absorption of other critical minerals such as copper and iron.
- If your nausea persists or gets worse, speak to your healthcare professional to rule out zinc poisoning and consider adjustment in your dosage.

Resources:

1. Zinc.
2. Zinc and the immune system.
3. Zinc in human health and infectious diseases.
4. Multifunctional role of zinc in human health: an update.
5. Zinc - fact sheet for health professionals.
6. Oral zinc-induced vomiting in children with acute gastroenteritis. Should we switch to low-dose zinc?
7. Zinc absorption by young adults from supplemental zinc citrate is comparable with that from zinc gluconate and higher than from zinc oxide.
8. Zinc: from biological functions to therapeutic potential.
9. The nutritional roles of zinc for immune system and COVID-19 patients.
10. Zinc toxicity.
11. Inhibition of iron and copper uptake by iron, copper and zinc.
12. Zinc-containing denture adhesive: a potential source of excess zinc resulting in copper deficiency myelopathy.
13. Copper.