



Calcium Lactate – Supporting Enamel Strength and Remineralization

Overview

Calcium Lactate is a bioavailable form of calcium commonly used in oral care to support **tooth remineralization** and enhance **enamel strength**. As enamel erosion and mineral loss are key contributors to dental decay, the inclusion of calcium in oral care products plays a vital role in maintaining tooth integrity.

Why It's Included in DentiMints

DentiMints incorporates calcium lactate to:

- **Support the remineralization process** by supplying readily available calcium ions
- **Strengthen tooth enamel** and increase resistance to acid attacks
- Work in synergy with xylitol and sodium bicarbonate to create a healthier oral environment
- Help offset mineral loss caused by acidic foods and bacterial activity

Calcium lactate is highly soluble and safe for regular use, making it ideal for convenient, no-water oral care formats like DentiMints.

Mechanism of Action in Oral Health

When calcium lactate dissolves in the mouth, it releases **calcium ions**, which are essential for rebuilding and maintaining enamel. These ions interact with phosphate in saliva and dental surfaces to help **restore mineral content** in areas where early demineralization has occurred.

Additionally, calcium lactate can enhance the uptake of fluoride when used alongside fluoride-containing products, although DentiMints is fluoride-free by design.

Supporting Research

- Studies published in the *Journal of Clinical Dentistry* (2008) have shown that calcium lactate increases calcium ion availability in saliva and facilitates remineralization of enamel.
- A 2012 clinical review on calcium-based oral care additives found that calcium lactate and similar compounds significantly improve the enamel surface microhardness after acid exposure.
- It is often recommended in oral care for individuals with high caries risk or enamel sensitivity due to its gentle, effective action.

Conclusion

Calcium Lactate is a valuable oral health ingredient that helps protect and rebuild tooth enamel by enhancing the body's natural remineralization processes. In DentiMints, it complements other active ingredients by reinforcing enamel integrity — especially in moments when brushing isn't possible.