

This is the third part of this series.

We will discuss the following:

... why it is important to take in an adequate amount of calcium and what happens in the body if not.

...

What is needed for the body to absorb and utilize the calcium when ingested.

...

What forms of calcium are recommended.

What happens if we don't take in an adequate amount of calcium?

... An inadequate intake of calcium can be a risk factor for osteoporosis

... Can develop osteomalacia.

... Can have hypocalcemic rickets.

... May suffer from hypoparathyroidism or chronic kidney disease (CKD) and need supplementation.

How is calcium absorbed, what is needed for calcium regulation, why is this important?

... calcium gets absorbed through two main mechanisms: first is through a transcellular active transport in the duodenum and jejunum and second by a paracellular passive transport process throughout the entire small intestine.

... calcium level regulation occurs by several signaling molecules, including vitamin D, parathyroid hormone (PTH), and calcitonin.

... calcium is important for its critical physiologic functions: a major component of bone matrix and teeth, involved in blood vessel constriction and relaxation, muscle contraction, nerve action, and cardiac electrophysiology. Calcium ions are an important component of blood clotting pathways.

What forms of calcium are recommended for supplementation?

... There are two primary forms of supplemental oral calcium: calcium carbonate and calcium citrate.

Coral calcium or calcium carbonate naturally contains magnesium, silica, and other trace minerals, it is usually obtained from coral sand deposits which were once part of a coral reef that are refined. Coral calcium's composition is similar to human bone and has been used as bone graft material for over 30 years.

Important to note here!!!! It is unwise and can be dangerous to take more calcium than recommended. Stay tuned... the next topic is vitamin D and why it is needed to regulate calcium.